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ABSTRACT

The identification of problems relating to deaf adults' access to nondegree-oriented programs of adult and continuing education (ACE), and suggestions for alternative solutions are the focus of this report of a national survey of 641 (response rate) deaf persons (those persons who cannot hear and understand speech spoken directly into their better ear). Following introductory material (chapter 1), chapter 2 defines the size and characteristics of the prevocationally deaf population in the United States. Included is basic demographic data on the age, sex, race, and geographical distribution of the population. The third chapter reviews the literature on ACE programming for general and deaf adult populations, focusing on the definition of ACE, characteristics of ACE participants, delivery systems, teaching methods and techniques, courses offered, and obstacles confronting deaf adults seeking ACE. The methodology followed in the needs assessment of continuing education for deaf adults is described in chapter 4. The fifth chapter presents the major findings of each survey conducted. The raw data and frequency distributions of responses to each question in each survey are given. These are followed by intergroup comparisons to identify areas of consensus and disagreement among the groups surveyed. Chapter 6 brings the material discussed in the preceding three chapters together for a delineation of the implications of the needs assessment. Interpretation of the results of the study provides the basis for policy recommendations presented in chapter 7 for consideration by the U.S. Office of Education, along with anticipated costs of each. (SH)

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CONTINUING EDUCATION

OF DEAF ADULTS

REPORT OF A SURVEY CONDUCTED FOR

BUREAU OF EDUCATION FOR THE HANDICAPPED

UNITED STATES OFFICE OF EDUCATION

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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All errors and misjudgments which have appeared in the report are the sole responsibility of the undersigned.

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1 June 1975
30 August 1975 (Revised)

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Chapter I

INTRODUCTION

The potential importance of adult and continuing education (ACE)[1] for deaf adults may perhaps best be appreciated by contrasting the wealth of opportunities accessible to adults who can hear with the few available to adults who cannot hear. Deaf adults share the needs, desires, and interests that motivate other adults to pursue organized and sequential learning opportunities. The major difference between ACE participation by deaf and hearing adults is not in the need but in the availability of adequate facilities.

In the United States today, according to the most recent published evidence, one out of every ten adults participates in some form of ACE each year (USDHEW, 1975). This high rate of participation in regularly scheduled, voluntary educational activity derives in

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[1]To avoid unnecessary repetition, the term "adult and continuing education" is abbreviated ACE in this report. The term refers to any organized and sequential learning activity in which the main purpose is for adults to acquire some type of information, understanding, or skill. When referring to deaf adults, the abbreviation CEDA (Continuing Education for Deaf Adults) will be used. Aside from the alphabetic distinction, CEDA and ACE differ only in that the former refers to deaf adults, and the latter to all adults.

large part from the important role education traditionally has played in American life. People enroll in ACE courses for career advancement, life enrichment, and information. ACE forms an important component of a richly diversified and multifaceted system for providing education to adults in America. Through the ACE system which encompasses four-year colleges and universities, two-year community colleges, vocational-technical institutes, specialized training programs, and a wide and diversified range of community organizations, ACE constitutes an avenue through which Americans can enhance many of their objectives.

Perhaps the most impressive facets of ACE are its diversity and potential near-universal availability. Adults in most urban and suburban communities, and in many rural areas have available to them, frequently at little cost, some program on almost every imaginable topic. From postdoctoral physicists seeking access to new techniques to high school dropouts wanting to pass high-school-equivalency examinations, from senior citizens desiring to broaden their cultural horizons to parents trying to keep up with developments in education --- Americans can usually depend on ACE to meet their needs. ACE, for its part, responds: churches, fraternal organizations, school districts, colleges, educational television, professional associations, and the United States government offer ACE courses. These courses are typically open to anyone who desires them, who can pay the often nominal fees, and who is willing to commit the necessary time.

Deaf adults, however, as the needs assessment reported upon in the following pages exemplifies, are severely restricted in their access to most ACE programs. The disability of deafness, which is the inability to understand speech through the ear alone, interferes with the very nature of instruction: the verbal interaction between teacher and student. The interference is not unique to ACE: it is present to one degree or another in educational programming. The communication barrier presented by deafness can be overcome by the use of manual communication, interpreters, special materials, and other techniques. With few exceptions, however, these techniques are not being utilized by ACE programs in the United States. The success of the higher-education programs for deaf people in the past decade is largely due to their widespread use of these technologies (Stuckless, 1972). They are vital to the success also of continuing education programs for deaf adults.

The rich diversity and potential near-universal availability of ACE to the general population then, mean little to most deaf adults. While one in ten normally hearing adults is believed to participate in ACE each year, the figure for deaf adults has not previously been determined. The American deaf population is estimated to consist of approximately 1,767,000 people, of whom 410,500 became deaf before reaching the age of 19 (Schein & Delk, 1974). These people, particularly the latter group of "prevocationally deaf" individuals, stand to benefit significantly from ACE programs.

This report focuses upon identifying the problems and upon proposing alternative solutions. The structure of the report is as follows. Chapter II defines the size and characteristics of the prevocationally deaf population in the United States. Included is basic demographic data on the age, sex race and geographical distribution of the population. In addition, the educational, vocational, and economic characteristics of the population are considered. These data have implications for structuring ACE programs for deaf people.

The third chapter reviews the literature on ACE programming for general and deaf adult populations. The literature survey serves to orient the present research in the context of the state of the art. The focus is upon six major questions:

(1) How is adult and continuing education defined?
(2) How many and what kinds of people participate in ACE?
(3) What delivery systems are used?
(4) What kinds of teaching methodologies and techniques are involved?
(5) What kinds of courses are offered?
(6) What obstacles confront deaf adults seeking ACE?

The methodology followed in the needs assessment of continuing education for deaf adults is described in Chapter IV. The procedures used were designed to bring to bear different perspectives upon the basic problem of providing continuing education to deaf adults.

Administrators, educators, experts on deafness, leaders in the deaf community, and deaf adults themselves were surveyed to obtain different points of view about current and projected needs. Taken together, the several surveys were designed to provide a comprehensive perspective of the problems and potentials of CEDA.

The fifth chapter presents the major findings of each survey. The raw data and frequency distributions of responses to each question in each survey are given. These are followed by intergroup comparisons to identify areas of consensus and disagreement among the groups surveyed.

Chapter VI brings the material discussed in the preceding three chapters together for a careful delineation of the implications of the needs assessment. Interpretation of the results of the study provides the basis for policy recommendations presented in Chapter VII for consideration by the U.S. Office of Education, along with anticipated costs of each.

The focus of this report is upon nondegree-oriented programs of continuing education. Concurrent with the present study, the United States Office of Education initiated a parallel investigation concerned with degree-oriented, higher-education programs for handicapped persons (including deaf adults). In an effort to avoid unnecessary overlapping and duplication, the present assessment left treatment of higher education to the other project. It must be understood that by

so doing, we do not intend to slight the importance of higher education. Indeed, it has great significance for a large portion of deaf adults. However, we have elected to concentrate on programs which do not lead to earned degrees, but which contribute importantly to the social and economic lives of deaf persons.

The major recommendations emanating from the surveys are listed below under the general headings to which they pertain. In Chapter VII, each recommendation is discussed in terms of its rationale, implementation, and estimated costs. Only the recommendations appear in this chapter. The reader is urged to consult the detailed presentation in Chapter VII to avoid possible misunderstandings of the recommendations' thrusts.

Delivery Systems

1. That regional postsecondary education facilities for deaf students under Section 625 of the Elementary and Secondary Education Act be mandated to provide CEDA in addition to their programs for deaf adolescents.

2. That the programs of the Center for Continuing Education at Gallaudet College be accelerated.

3. That additional institutions of higher education be induced through incentive grants to offer CEDA programs.

4. That a program be established to inform and encourage educational institutions to provide CEDA in their communities.

5. That an intensive, systematic research program be initiated to determine the most efficient means of using television and film in CEDA.

6. That distribution of the supplemented ACE course materials be made through the existing agencies contracting with the Captioned Films Branch of BEH and through the Learning Resources Branch (S_2 and S_4 and NCEMMH), as well as through established libraries for continuing education materials, both commercial and nonprofit.

Subject Area

7. That support be given to encourage participation by small numbers of deaf adults in ACE offerings that do not attract sufficient deaf persons to be self-supporting.

Personnel

8. That short-term programs be established to prepare ACE personnel for CEDA.

9. That funds be allocated to speed the training of manual interpreters.

10. That short courses on deafness be offered to counselors who will be employed in CEDA.

11. That funds be allocated to evaluate personnel training and to research alternative approaches to the use and preparation of CEDA personnel.

Instructional Methods and Materials

12. That an exhaustive review of all available media software for ACE courses be made to determine which have potential fro being visually supplemented for CEDA.

13. That a review be made of the procedures used by Captioned Films for the Deaf in purchasing or leasing film and television materials for deaf adults, especially as they regard copyrights and releases for materials which would be suitable for broadcast over television.

14. That selected existing ACE course materials (especially film and videotape materials) be visually supplemented for adult deaf students.

15. That a research and development project be funded which would create and evaluate a fully mediated course for deaf adults.

Note that the preceding recommendations address themselves almost entirely to efforts by the Federal Government. That orientation arises from the nature of the contract under which this study was conducted. The roles of State and local governments and of nongovernmental agencies should not be ignored: their support is critical to CEDA's success. Equally crucial are deaf adults, not only as participants but also as program planners and directors. As the surveys found the need for CEDA is great but its acceptance by deaf adults is hardly universal. More involvement by deaf consumers in design and execution of CEDA will likely mean greater participation in the instructional programs.

Any assessment of needs necessarily relates to the specific conditions under which it was done. The present assessment is no exception. Since the survey's cutoff date of April 30, 1975, new programs may have begun, programs in existence at the time of the survey may have been terminated, other programs may have undergone significant alterations. The only adequate response to a changing field is a continuing assessment. As new programs evolve, materials develop, strategies succeed or fail, the assessment must continue, providing funding sources, administrators, professional personnel and participants with current data essential to efficient operation and intelligent planning.

The study of deaf adults' needs for ACE programs has not ended. Indeed, in a very real sense, it has just begun. The beneficiaries of this beginning are the deaf adults of today and tomorrow, and ultimately American society itself.

Chapter II

THE PREVOCATIONALLY DEAF POPULATION

The following description of the prevocationally deaf population has been taken from The Deaf Population of the United States (Schein & Delk, 1974). What is presented in this section is a description of the average deaf person. To avoid any contribution to the stereotyping of deaf individuals, we have referred frequently to dispersions around the average on each characteristic. Some deaf persons attain doctorates and distinguish themselves in professional callings, while others are illiterate and work at menial tasks, if at all. Exclusive attention to averages might create the false image of a population homogenized by its common feature, deafness. In many respects, deaf people differ as much from each other as they do from all other individuals. It is this latter point which requires constant repetition, while recognizing the necessity for summary statistics for purposes of communication.

Impairment of hearing is the single most prevalent chronic physical disability in the United States. More persons suffer a hearing defect than visual impairments, heart disease, or other chronic disabilities. Yet despite the frequency with which it occurs in the general population, hearing impairment receives far less attention than would be justified by the number of persons afflicted. As a result, deaf persons tend to be less educated, hold lower status jobs, and earn less than their general population peers.

We have defined the target population for this survey as those persons who cannot hear and understand speech when spoken directly into their better ear, such impairments to have been suffered prior to 19 years of age. The definition of the target population takes into account the degree of impairment and the age at onset. Both factors are critical to explicating the effects of hearing impairment. Damage to hearing of the same extent occurring at different stages of life will have different psychological consequences. This educationally significant group has been named the prevocationally deaf population.

Size

Using the above definition of deafness we estimate the prevocationally deaf population of the United States to be 410,522 persons, a prevalence rate of 203 per 100,000 population, as of 1971. The geographic distribution of prevocational deafness does not occur evenly across the United States (Table 1). When the United States is quartered regionally, the largest prevalence rate for prevocational deafness is found in the North Central region and the lowest in the Northeast. The former has a rate almost 40 percent larger than the latter. The South and West have nearly identical rates, about 24 percent lower than that for the North Central region.

Table 1

Prevalence and Prevalence Rates for Prevocational Deafness, by Regions: United States, 1971.

U.S. and Regions	Prevalence	Rate Per 100,000
United States	410,522	203
Northeast	83,909	173
North Central	135,653	242
South	123,360	196
West	67,700	194

Source: Schein and Delk, 1974.

Age

Prevocational deafness is not uniformly distributed across all ages. The 25-to-44 age group has a much lower prevalence rate than the 17-to-24 group, so that even if the general population remained constant, the proportion requiring special services would grow rapidly. Table 2 gives the prevalence and prevalence rates for prevocational deafness by age.

Sex and Race

A higher percentage of men than women are prevocationally deaf. Deafness affects females more adversely than males. When deaf males and females are compared to like-sex persons in general rather than to

each other, deaf females show higher unemployment rates, lower personal incomes, higher divorce rates, and lesser educational achievements. As with sex, the less-favored deaf racial group does less well than its general-population counterpart. Nonwhites have a lower prevalence rate of prevocational deafness. For those nonwhite deaf persons identified, occupational conditions are poorer. Unemployment rates are higher and job levels lower. Nonwhite males have the lowest median grade completed in school. Personal earnings for nonwhite males and females are substantially below those of white deaf persons.

Table 2

Prevalence and Prevalence Rates for Prevocational Deafness in the Civilian Noninstitutionalized Population, by Age: United States 1971.

Age	Number	Rate Per 100,000
All Ages	410,522	203
Under 6	8,071	38
6 to 16	86,278	191
17 to 24	46,154	169
25 to 44	56,865	119
45 to 64	93,839	225
65 and over	119,315	617

Source: Schein and Delk, 1974

Family Composition

Most prevocationally deaf persons' parents have normal hearing. They are unprepared for their deaf child, and frequently have great difficulty adjusting to their child's disability. When the deaf child becomes an adult and marries, the spouse will most likely be deaf, too. However, deaf persons marry less frequently than their age peers in the general population, and the deaf marriages tend to be somewhat less stable than marriages in general.

Fertility rates for deaf women are below those for the general population. The offspring tend to have normal hearing, varying from 81 percent for matings of congenitally deaf pairs to 92 percent for matings of an adventitiously deaf person with a normal-hearing person. Reproduction rates in the deaf population appear to have fallen more rapidly than in the general population.

Education

The average educational attainment of prevocationally deaf adults falls below that of the general population. This finding is particularly distressing in view of the likelihood that academic achievement of deaf students differs from students in general who have completed the same grade. The average deaf high-school graduate probably has not achieved

as much academically as his or her nondeaf counterpart. The one-year median difference in educational attainment between deaf and general-population adults, then, probably reflects a much larger disadvantage.

With respect to the future, the NCDP projections of postsecondary school enrollments over the coming decades arouse grave concern about the nation's capacity to manage the number of students foreseen. Merely accepting these students in regular programs is not apt to provide them with an education. Most prevocationally deaf students require specialized instruction --- an educational commodity in short supply.

Communication

Because deaf people constitute a small minority within the general population, they must accommodate to the larger group, rather than vice versa. The extent of the accommodation can be seen in the communication patterns adopted by deaf people. Most use speech, expressively, and lipreading, receptively, at least some of the time in their daily intercourse. But they also use fingerspelling, signing and writing in interpersonal contacts, depending upon the circumstances. In short, the majority of prevocationally deaf persons are polymodal communicators.

Income

The clearest measure of the penalty exacted by deafness is personal income. The average annual income for employed deaf persons falls $2,273 below the comparable figure for the general population --- $5,915 versus $8,188. The prevocationally deaf worker's average income is 72 percent of the general population average. The nonwhite deaf worker earns, on the average, only 62 percent as much as nonwhite workers in general.

Occupation

Stereotypes of deaf workers receive little support from the facts. Prevocationally deaf persons work in every industry, performing a vast array of tasks. The largest proportion are nontransit operators; i.e., they run machines of various kinds in factories. Craftsmen make up almost as large a group. Professional and technical jobs are next most frequent. Of course, these gross categories do not contain numbers of deaf persons in the specific occupations proportional to the general population. There are fewer deaf lawyers, doctors and dentists than would be expected from their numbers alone, though there are some of each. The proportion of blue-collar workers is, on the other hand, far higher among deaf workers than among workers in general.

Morbidity and Mortality

One out of three prevocationally deaf persons has an additional disability. This proportion assumes increased significance from the realization of how heavy a burden a second disability places upon a person already deaf. Mortality data do not reflect the morbidity picture. It is likely that, as with their deafness, many of the secondary disabilities to which prevocationally deaf persons fall victim are not life threatening. Information suggests that longevity in the deaf population is equal to or greater than that of the general population.

Chapter III

ADULT AND CONTINUING EDUCATION: REVIEW OF THE LITERATURE

This review of literature responds to six major questions: (1) How is the subject defined? (2) How many and what kinds of people participate in it? (3) What delivery systems are used? (4) What kinds of teaching methodologies and technologies are involved (5). What kinds of courses are offered? (6) What obstacles to participation exist? Discussion of each of the six questions proceeds from consideration of the general population to consideration of the deaf population.

(1) How is "Adult and Continuing Education" Defined?

General Population

Among educators, the term adult and continuing education is considered to encompass organized and sequential learning activities in which the main purpose is for adults to acquire some type of information, knowledge, or skill. In the sense that ACE is "organized and sequential," it differs from the incidental learning all adults experience from random reading, occasional lectures, museum visits, television, and movies.

What we understand as ACE has also been called "adult education", "extension education", "recurrent education", "life-long learning", and a number of other names. We elected ACE because it is more definitive of the major focus of this report, and because it has wide currency amongst educators.

Deaf Population

Educators concerned with adult and continuing education for deaf adults have employed a number of definitions to delimit the field of inquiry. Fortunately for our purposes, these definitions do not differ markedly from those used by professionals in ACE. Block (1973), for example, reporting on a needs assessment of adult and continuing education for deaf adults in Illinois, defines ACE as "education extended into or resumed during adulthood" (p.3). He includes postsecondary, vocational, and adult basic education within the term adult and continuing education. Delgado and Boggs (1972), to take another example, consider ACE to incorporate life enrichment, vocational, cultural, skill-building, and other non-degree courses of study. Smith (1969) includes not only non-degree coursework but also credit courses taken part time while employed full time in a job.

Such differences in definition of terms appear endemic to ACE, as indicated earlier in this chapter. Despite the differences, writers concerned with ACE with deaf and with general adult populations appear to share substantial agreement as to exactly what it is they are talking about.

(2) How Many and What Kinds of People Participate in ACE?

General Population

The National Opinion Research Center (Johnstone & Rivera, 1965) estimated that about half of the adult population can be regarded as potential ACE participants. About four adults in ten say they are interested enough in a particular subject to take a course in it, three others say they are interested in a subject but not enough to study it formally, and three say they have no interest in any particular subject.

The estimates of adults engaged in continuing educational activities vary from 13,000,000 to 60,000,000. Such differences result principally from differing definitions of what constitutes ACE, duplication of enrollments and differences in defining adulthood. The 1969 survey by the National Center for Education Statistics (USDHEW, 1975) found that about 11 percent (13,150,000) of American adults participated in some form of ACE experience during the year ending May 1969. Of this number, some 27.7 percent were enrolled in public or private schools; 27.5 percent in job training; 25.2 percent in college or university, part time; and the remainder in community organizations (13.4 percent), correspondence courses (8 percent), tutor or private instruction (5.8 percent), and other adult education (10.3 percent)[2]. (The totals add to more than 100 percent due to a multiple participation.)

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[2]An indication of the difficulty of estimating ACE participation is in the figure for correspondence study. The Office of Education reports 8 percent or about 1,100,000. The correspondence schools themselves report an enrollment of over 5,000,000.

The earlier study published by the National Opinion Research Center (NORC) for the Carnegie Foundation (Johnstone & Rivera, 1965) which, until the 1969 and 1972 National Center for Education Statistics Studies became available, was generally regarded as the most authoritative study on ACE participation, found that 25 million adults (one out of every five adults) had enrolled in some form of ACE activity during 1962[3]. Of this number some 9 million were engaged in independent study, including correspondence study. Almost all of the 25 million were enrolled on a part-time basis and in non-degree programs. The differences in numbers between the Office of Education and the NORC studies are primarily differences in definitions, especially in the meaning of "independent study".

In general, both studies confirmed other studies which show that three variables --- educational level, socioeconomic status, and age --- are the most important determinants of ACE participation. Other variables such as sex and race show little impact on enrollment in ACE programs. Residents of urban areas and their suburban surroundings attend ACE programs more frequently than do rural residents, but this is primarily a function of availability of resources rather than differences in attitudes about ACE by urban and rural students. The correlation between the amount of education and the socioeconomic status of a person and the likelihood of his participating in ACE activities is quite direct; a negative correlation exists between age and ACE participation. The Office of Education study shows that 18.2 percent of those under 35 years of age were in ACE programs, as compared with 7.7 percent of those over 35.

The major emphasis in ACE is on vocationally related subjects, particularly for younger adults and for those with lower educational attainment and socioeconomic status. Among the older, better-educated persons from higher socioeconomic levels, men were more interested in vocational goals, while women preferred family life and leisure-time studies.

According to the NORC study, the subjects in which ACE participants enrolled in 1962 were widely divergent. The NORC estimates of enrollments by type of course were:

Type of Course	Number Enrolled
Job-related subjects and skills	9,020,000
Hobbies and recreation	5,470,000
Religion, morals and ethics	3,820,000
General education (liberal arts, languages, humanities, etc.)	3,500,000

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[3]The study also estimated that about half the adults had participated in ACE activity sometime in their lives.

Type of Course	Number Enrolled
Home and family life	3,440,000
Personal development (communication skills, physical fitness, etc.)	1,700,000
Current events, citizenship	1,080,000
Agriculture	320,000
Miscellaneous	970,000

The 1969 and 1972 National Center for Educational Statistics Studies in general confirm the NORC findings. Job-related subjects still predominate, with some 58 percent of the adult students enrolled in professional or occupational programs. (The total number of part-time students in postsecondary professional and occupational activities was almost 50 percent higher than the number of full-time college students.) The projected 1975 study will probably indicate an increase in the percentage of persons in adult basic education (reading, writing and mathematics) as a result of the recent infusion of federal funds in this area.

Numerous studies (including the NORC study) have been conducted to find out why people enroll in ACE. Many of the studies agree that the reasons are as varied as the individuals who participate in the programs. People take courses to meet the whole hierarchy of human needs promulgated by Maslow --- survival, security, social, recognition, and ego fulfillment. Most adult educators accept the thesis of Professor Cyril O. Houle (1961) that ACE participants can be fairly evenly divided between those who are goal-oriented (self development in jobs, in leisure-time skills, in cultural awareness, etc.), those who are activity oriented (to meet people, a change of pace, etc.), and those who seek further knowledge for its own sake.

Deaf Population

Estimates of the number of participants in CEDA have not been made. No documented evidence has been found in an extensive bibliographical search. One of the major objectives of this study is to derive estimates of participation in CEDA.

(3) What Kinds of Delivery Systems are Used?

General Population

The field of ACE has rightfully been described as "diverse and amorphous." There is little support for any organization or association of organizations that seeks to coordinate or unify the field at any level --- local, state, regional, or national. Essentially, ACE is conducted by local institutions acting independently --- and frequently in competition with one another.

All types of educational institutions in the country conduct ACE programs. The spread and quality of courses vary with the educational institutions, but in most instances the ACE program is considered secondary to the main purpose of educating elementary, secondary or college students. In almost all instances, ACE, unlike the other programs of these institutions, must be self-supporting, nearly so, or supported

by an outside source.

Most adults, however, do not participate in ACE activities conducted by educational institutions. Rather, they take part in programs sponsored by organizations which have education as a peripheral interest. These include religious institutions, business organizations, labor unions, government agencies (including the armed forces and agricultural extension), professional associations, libraries, museums, etc. Proprietary schools abound in most cities of the country. In New York City, some 1,700 proprietary schools offer educational programs for adults in fields as diverse as barbering, truck driving, computer technology, paramedical technology, and post doctoral engineering.

According to the 1965 NORC study, more adults participated in ACE sponsored by churches and synagogues than by colleges and universities. Community organizations (Y's, libraries, museums, etc.) and business and industry groups, each accounted for more students than did public elementary and high schools. The following table shows NORC's estimates of the number of persons enrolled in programs offered by the various sponsoring organizations in 1962[4].

Type of Sponsoring Organization	Number Enrolled
All Programs	14,630,000
Churches and Synagogues	3,260,000
Colleges and Universities	2,640,000
Community Organizations	2,240,000
Business and Industry	1,860,000
Elementary and High School	1,740,000
Private Schools	1,120,000
Government (all levels)	1,050,000
Armed Forces	480,000
All Others	240,000

In addition to the above, NORC estimated that some 9,000,000 persons were enrolled in some form of independent study, either through correspondence or with a tutor (music lessons, etc.), or self-directed study (largely languages). To a considerable degree, much of the new emphasis on non-traditional instruction in the colleges and universities has involved adults in self-directed study. Such programs as the various college-sponsored "universities without walls", the awarding of college credit by examination (College Level Examination Program --- CLEP), the several states which sponsor programs like New York State's Empire College, the off-campus programs of Oklahoma and Syracuse Universities and Goddard College, the use of standardized equivalency tests (for high school diplomas), and the provision of degree credit for

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[4]It should be again emphasized that the figures in even this most "authoritative" study differ dramatically from those of the groups involved; e.g., in 1962 the colleges and universities themselves reported more than 4,000,000 registrants.

"life experience", all have attracted adults, but in relatively limited numbers. Moreover, preliminary studies indicate that many students, particularly those from lower socioeconomic levels and with limited formal education, find the discipline of self-directed study too demanding and the motivational requirements too great.

By and large, when adults do attend educational institutions, those who have less formal schooling use secondary schools and those who have gone through high school or beyond, use colleges and universities. Generally, too, the university setting is more important to men than to women.

Deaf Population

Programs for deaf adults have used delivery systems much more restricted in scope and diversity. Few programs have been established in the years since the St. Louis Board of Education inaugurated what appears to be the first CEDA program in the late 1920's (Delgado & Boggs, 1971). Most of those which have begun have typically been sponsored by schools for the deaf, speech and hearing clinics, churches, and rehabilitation facilities. In addition to a paucity of CEDA programs, offerings within each program have been limited in almost all cases to fewer than a dozen courses. Yet deaf people consistently have requested a wide range of courses. Classes requested by the adult deaf tend to be the same as those offered in regular adult and educational programs. If the communication barrier could be eliminated, deaf adults probably would enroll in many of the courses offered (Friedman & Hall, 1969; Kirchner, 1970).

Instructors of special classes for deaf adults include teachers of the deaf, interpreters, ministers, and deaf adults. Separate classes usually were established because it was believed that (a) deaf adults generally prefer segregated over integrated classes; (b) the speech, speechreading, and language limitations characteristic of many deaf adults preclude integration, and (c) that support for interpreting services is generally unavailable. The latter point is particularly well-taken. Interpreters were, and continue to be, scarce.

Regardless of rationale for establishment, most of these programs failed within a few years of inauguration (Friedman & Hall, 1969). The major reasons for failure appear related to the difficulty of providing the flexibility and individualized curriculum required to meet the needs of small but highly diversified groups of deaf people. Deaf people do not necessarily have anything in common but deafness itself. Another reason concerns involvement of deaf adults in the planning, direction, and execution of programs. As the experience of Project DAWN illustrates, when deaf adults are involved from the start, interest among the deaf community is generally strong and remains high (Kirchner, 1970). Conversely, in the absence of deaf consumer involvement, interest often dies quickly. Illustrative of the stimulation provided by deaf leaders

are the early efforts by participants in California State University at Northridge's National Leadership Training Program (NLTP). The inspiration, guidance, and leadership provided by deaf NLTP participants in inaugurating and conducting continuing education programs for deaf adults in California were instrumental in the success of these programs (Jones, 1963, 1964, 1965).

In 1972, the Center for Continuing Education was established at Gallaudet College. This program, which coordinates classes in the Washington D.C. area and in selected other locations, stresses integration of deaf students in ongoing programs for the general population. Interpreters are provided for the benefit of deaf persons enrolled in classes with hearing students. Under this model, the delivery systems used are virtually identical with those identified above in connection with ACE for general students: public and private universities and school systems, community colleges, etc. A small coordinating team performs outreach and referral functions and schedules interpreting. Teachers and facilities are provided by the ongoing general programs.

Similar programs have been established at La Guardia Community College (in New York City), Philadelphia Community College, Portland (Oregon) Community College, and Wright Junior College (in Illinois). In accordance with the model designed by the Center for Continuing Education, these programs focus upon integrated classes. They do, however, provide some courses only for deaf students when there is a sufficient number of them.

A basic difference exists between these programs which emphasize integration of deaf students into classes being offered to normally hearing students and earlier programs which focus primarily upon establishing new classes specifically for deaf students (e.g., Kirchner, 1970). The former model utilizes already existing facilities and teachers paid by ongoing programs. Integration of deaf students into these classes basically requires only that interpreting be provided. The deaf community benefits from a wide range of offerings and from expert instruction in each course area. The major problem facing programs desiring to follow this approach is the high cost and low availability of qualified interpreters. Additionally, such an approach ignores the likely need for educational counseling, specialized materials and social interaction which deaf students need as much or more than most normally hearing students.

(4) What Teaching Methods and Technologies are Employed?

General Population

Every method and technique used in elementary, high school and college teaching has been, and is, used singly and in combination in ACE. In fact many of the more familiar methods and technologies were introduced by adult educators. Methods include individual study (correspondence, tutorials, self-directed, etc.), large group (conferences, institutes, etc.) and small-group instruction (lecture, discussion, workshop demonstration, role playing, computer simulations,

games, laboratory, etc.). No evidence exists that one teaching method is best for all students and all courses. On the contrary, each method has particular value in meeting particular learning objectives.

Technologies of ACE include the full traditional range of primary and supplementary teaching aids which are used in other educational settings. This includes the use of written materials and audio-visual aids --- from chalk boards through maps, films, slides, radio, records and audio cassettes, TV and videotape cassettes. Written materials and texts are by far the most commonly used in support of lectures.[5] Increasing attention is being given to the role of TV and videotape cassettes as instructional technologies, but despite such national educational television program series as "Sunrise Semester" or the "Ascent of Man", the number of persons using such methods is still relatively small. While it seems certain that greater use will be made of television, there already is a shift away from trying to conduct full courses solely by broadcast television or videocassettes in favor of using the medium in concert with some of the more traditional methods and technologies. Most promising for the future of ACE seems to be the kind of mixed-media programs of the British Open University (written materials, tutorials, group instruction, radio, television, etc.) already in use in some American community colleges, colleges and universities; and business and professional groups. Little use of television alone is now made for adults in public schools or community organizations.

Deaf Population

Few materials and/or technologies have been developed specifically for CEDA. Materials developed for or by schools for deaf children are often used with deaf adults for the simple reason that few other appropriate materials are available. Deaf adults generally are characterized by depressed reading levels, with the average 18-year-old deaf student reading at the fifth grade level (Annual Survey of Hearing Impaired Children and Youth). Special materials are required which can be read by deaf adults without insulting them: high-interest, low-vocabulary materials. Such materials are in short supply (Boggs, 1972; Friedman & Hall, 1969; Kirchner, 1970). The Center for Continuing Education at Gallaudet College is currently preparing materials specifically geared to the needs and desires of deaf adults, especially those with depressed reading levels who seek adult basic education.

Most programs for deaf adults use what has been called the simultaneous method or Total Communication. The teacher signs and

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[5]Unfortunately, it remains as true for ACE as for all other forms of instruction; in the hands of a good teacher even inadequate materials and technology can be used effectively, while when used by a poor teacher even the best material and technology are unavailing.

speaks at the same time, and uses visual aids and printed material as supplements to instruction. When interpreters are provided for integrated classes, the interpreter translates into manual signs what the instructor and the hearing students say. If the deaf students prefer not to speak themselves, the interpreter translates their signs into spoken English for the benefit of the instructor and the hearing students (Friedman & Hall, 1969).

(5) What Kinds of Courses are Offered?

General Population

Most adult education administrators have not needed to be prompted by the rash of recent literature urging that education be made more relevant to the needs and interests of ACE students. ACE administrators have acted on this premise for a long time. If they did not, they quickly learned that ACE students "voted with their feet" (by not coming to courses at all or dropping classes after enrolling in them). In fact, one of the weaknesses frequently attributed to ACE is that it is often too consumer-oriented --- it is too prepared to soften its pedagogy to meet suspected, albeit erroneous, limitations of part-time students.

In initiating programs, however, experienced ACE administrators tend to act on trial and error, instinct and intuition. Curiously, the many surveys in which adults are asked to express their course interest have not produced programs which were more relevant than the informed guesses of experienced administrators. The administrator of a general-purpose ACE institution will know, or have a feel for, many of the educational needs in his community or he will consult with experts or specialists and get from them some idea of existing needs in their various fields. If the area of need fits within the general objectives of the institution and faculty resources are available and tuition (or other) financial support seems likely, then the administrator will undertake a program. Depending on the response, the program will be retained, expanded, or dropped.

Less frequently, but much more creatively, the ACE administrator will uncover for many people needs which have not yet been articulated. Thus, programs like that of training paralegal assistants brought in a wholly new audience of legal secretaries who had thought they were at the end of their career ladder. To a considerable degree, the whole movement of career education has been a product of ACE administrators. One thing is certain: ACE administrators as a group are occupationally attuned, and by temperament more than willing, to serve the adult educational needs of the community. Their constraints are primarily financial. If they can solve funding problems, they are prepared to create programs relevant to all who need them.

Deaf Population

Course offerings made available to deaf adults have generally been determined by experts on deafness, rather than by deaf adults

themselves. Most CEDA programs have restricted their offerings to basic courses in reading and writing (Boggs, 1972). The Center for Continuing Education at Gallaudet, by contrast, has selected courses on the basis of needs assessments involving deaf adults, deaf leaders, and experts on deafness. As a result of these studies, courses of demonstrated interest to the local deaf population have been made available.

The difference between the Gallaudet program and most other CEDA programs illustrates a basic difference in philosophy. While most programs have offered courses specifically for deaf adults, the Gallaudet program attempts to open already available courses in the community to interested deaf students. The result is a wider range of offerings than would be economically feasible if only deaf persons were enrolled. Special courses for deaf adults are also made available in areas of interest exclusive to the interests of deaf people (e.g., teletypewriter maintenance). Such courses, however, are few in number.

(6) What Obstacles Exist to Participation in ACE?
General Population

The single most important obstacle preventing more potential ACE participants from enrolling in courses is financial. Some 43 percent of the respondents in the NORC study indicated that tuition fees prevented them from attending classes[6]. Other major reasons cited were busy schedules and a lack of physical energy at the end of the day. In comparison with these situational restraints, the motivational restraints "Not the studying type", "Feel too old to learn", "Would feel childish", --- were of a much lower magnitude. Only among older persons of lower socioeconomic status was the psychological barrier almost as high as the situational restraints.

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[6]Tuition fees in ACE are determined by the individual institution. Fees for college credit courses are typically at the same level for the part-time or evening student as for the full-time student. In non-credit courses offered by colleges, the fees are usually one half or less than a credit course with the same number of contact hours. Public school ACE programs will usually cost less than half of non-credit college courses. Basic literacy programs, where offered, are usually free --- supported by local, state or federal funds. The same is true of the federal manpower programs. Programs by community groups are typically set quite low. The cost for proprietary school programs is quite high. Most significant, however, is that up to the last three or four years, scholarships for adult and part-time students were practically nonexistent. Adults were expected to pay for themselves. Only now is there a beginning breakthrough in this area.

One of the major problems facing adult educators is the high rate of dropouts from ACE programs.[7] Several studies have attempted to identify the specific reasons people leave the classes in which they were enrolled. Several studies have indicated that dropouts tend to be younger, unmarried, have no dependents or regular job, and little prior adult-education experience. On a more general level, there seems to be agreement that most of the reasons can be subsumed under two interrelated categories. The first is that the subject matter of the program did not meet the needs of the adult, either because of uncertainty by the student of what or why he wanted to study, or of no, or poor, pre-course advisement (including inaccurate course descriptions). Secondly, the teaching methods and/or the learning environment do not make the physical and psychological effort for continued attendance commensurate with the need for learning the subject matter.

Among undereducated adults and those from lower socioeconomic levels, who, as already noted, tend to have greater resistance to enrolling in ACE classes, the problem of teaching methodology becomes especially important for student retention. The Guide for Teacher Trainers in Adult Basic Education (National Association for Public School Adult Education, 1966) lists the following characteristics of undereducated adults, each characteristic having its own teaching/learning consequences:

Lack of self confidence,
Fear of school,
Living in conditions of economic poverty,
Below-average scholastic aptitude,
Culturally deprived,
Values, attitudes and goals differing from upper-and middle-class norms,
Weak motivation,
Unusually sensitive to nonverbal forms of communication,
Varying levels of intelligence,
"Live for today" philosophy,
Use of defense mechanisms,
Tendency to lose interest.

Unfortunately, in too many instances, teachers of undereducated adults are not prepared to deal with these special instructional problems.

Deaf Population

Many of these above obstacles are also reported in the literature on CEDA (Friedman & Hall, 1969). Financial limitations may be somewhat more pressing with deaf than with hearing adults, as deaf persons

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[7]Some years ago, a study of proprietary correspondence schools showed that the schools depended on a dropout rate of 80 percent before the fourth lesson was mailed, in order for the school to break even on its tuition fees.

tend to have lower income levels. Schein and Delk (1974) report that, in 1971, average income level for the employed deaf population was 72 percent of that for the employed general population.

As noted above, the lack of suitable programs is a second obstacle. Whereas ACE programs for the general population are fairly abundant, similar programs for deaf adults are not. Participation by deaf adults in general ACE programs is restricted by the communication barrier. An obvious solution, manual interpreting, raises additional problems. First, interpreters are scarce. Second, the cost of interpreting, when it is available, may be relatively high (Friedman & Hall, 1969). The obvious solution to increasing the variety of programs is, therefore, not as readily available as might be expected.

A third obstacle is the lack of suitable materials. The need for high-interest, low-vocabulary materials was discussed above. A fourth major obstacle has been the absence of coordination and planning in CEDA (Kirchner, 1970). Little information about programs in different areas of the country is available. Cross-fertilization and interprogram facilitation are rare. The Gallaudet continuing education program is attempting to overcome this problem.

Finally, the teaching technologies used constitute a fifth obstacle. The use of schools for the deaf as facilities, teachers of deaf children as instructors, and materials used in teaching deaf youth as reading matter induces in many deaf adults a reluctance to participate in CEDA (Block, 1973; Boggs, 1972). Deaf adults often complain that there is nothing new in the CEDA programs offered to them; the courses are merely a rehash of what they received in school. As noted above, such perceptions by potential students are often fatal to CEDA programs. Continuing education must be consumer-oriented in identifying needs and in presenting new and exciting opportunities. A major contributing factor to the perception that CEDA has little to offer to them is the lack of input of the deaf community's views in planning. As in other areas, consumer involvement is crucial to the success of CEDA (Friedman & Hall, 1969; Kirchner, 1970; Rarus, 1972; Stuckless, 1972).

Project DAWN represented an attempt to overcome many of these obstacles. Funded by a grant from the Office of Education, DAWN (Deaf Adults With Needs) assembled at California State University at Northridge a group of deaf leaders drawn from across the country, for the purpose of training these deaf leaders how to facilitate the inauguration of CEDA. Participants were instructed in needs assessment, leadership, identification of resources, and techniques of effecting change. Following the workshop, they returned home to implement strategies for bringing together deaf people, teachers, and ACE directors. Regional follow-up workshops were conducted six months after the original training program. DAWN resulted in the establishment of a number of CEDA programs, including several in schools for deaf students (Kirchner, 1970; Rarus, 1972).

Financial barriers of several kinds have been identified. The first is the requirement that adequate funding be available for any CEDA programs. Administrators of ACE programs will respond with offerings when and if funding is made available. Demonstrated need is not sufficient to stimulate programming. This is evident when ACE programs for the poor and disadvantaged are considered. Despite obvious needs, little was done until federal support for manpower training became available. A similar situation appears to pertain in CEDA. Too little is being done. As increased funding is provided, programming will increase proportionally.

The second financial barrier concerns the special costs of CEDA. Deaf adults generally have low income levels. Yet instructing them involves costs beyond those of the average ACE program. The relatively small size and wide geographical dispersion of the adult deaf population present major problems in designing CEDA programs. Not only are deaf people few in number in any given area relative to the general population (prevocational deafness occurs nationally at the rate of 2 per 1,000) but the few deaf people in any given area present a wide variety of needs and desires. Policy decisions are required to determine how CEDA programming may best be designed to overcome these problems. These decisions, in turn, require solid data on the size and characteristics of the adult deaf population, the needs for CEDA, and the availability of resources.

Chapter IV

METHODS USED TO GATHER DATA

Because interpretation of the results of the assessment rests upon comprehension of the procedures, a detailed account of the survey's methodology is given below. The methods used are well-established in survey research. Only the target population is unusual.

Definition of Deafness. For purposes of this survey, the target population is defined as those persons who cannot hear and understand speech spoken directly into their better ear. When such impairment is suffered prior to 19 years of age, we use the term prevocationally deaf. The use of this phrase serves both to delineate the degree of hearing impairment and the age at its onset. This definition of deafness has been used in the National Census of the Deaf Population to identify individuals who constitute an educationally significant population (Schein, Gentile & Haase, 1970; Schein, 1973; Schein & Delk, 1974).

While this study has concentrated on those who were deafened early in life, it should not cause the reader to overlook the large number of persons who became deaf in adulthood. Of every four deaf adults, three lost their hearing at or after 19 years of age. Their need for CEDA is no less than that of the prevocationally deaf population.

For simplicity in presentation, however, we have used deaf instead of prevocationally deaf throughout most of this report. We hope this concession to our readers' convenience will not prove confusing or ultimately misleading to them.

Definition of Terms Used. In developing the survey, the following definitions were used to distinguish among educational types:

Adult and Continuing Education (ACE): Organized and sequential learning activities in which adults who are responsible for themselves seek information, knowledge, and/or skills.

Continuing Education for Deaf Adults (CEDA): ACE designed or adapted for deaf adults, whether in classes separate from or mixed with adults who can hear.

Basic Education: Reading, Writing, Mathematics, and other basic skills.

Higher Education: Degree-bound instruction at the college or post-college level.

Vocational Education: Programs directed toward development of marketable skills, inclusive of professional skills.

Avocational Education: Programs concerned with hobbies, public affairs, cultural development, and other matters having no necessary relation to degrees or vocational attainment.

Survey Methods

The sources of information about CEDA were deaf adults, deaf leaders, and state departments of education and vocational rehabilitation. Each group was sent a questionnaire specially designed for it. In addition, major public and private universities were queried by mail and experts on CEDA were interviewed. Responses from these sources have been analyzed in relation to the results of others reviewed in the preceding section. Together, this body of information forms the basis for the recommendations which appear in the final chapter.

Survey of Deaf Persons. A stratified random sample was drawn from the deaf adults on file in the National Association of the Deaf and New York University Register (Schein & Delk, 1974). The register was stratified by region, sex and age; and 1,200 persons were selected. The parameters for selection were provided by the National Census of the Deaf Population. The distribution of the sample by region, sex and age is given in Table 3.

The initial mailing for the survey of deaf persons was sent out on January 16, 1975. Because of the size of the sample the actual folding, affixing labels, inserting, sealing of envelopes and affixing postage was handled by Graphics Letter Service of New York. The mailing packet consisted of the questionnaire (CEDA-1, the first page of which was the cover letter), a postage-paid, self-addressed return envelope and the mail-out envelope (see Appendix A).

Table 3

DESIGN OF SAMPLE FOR
SURVEY OF PREVOCATIONALLY DEAF ADULTS

AGE:	NORTHEAST (240)		NORTH CENTRAL (396)		SOUTH (360)		WEST (204)	
	Sex		Sex		Sex		Sex	
	M (117)	F (123)	M (193)	F (203)	M (175)	F (185)	M (99)	F (105)
18-24	28	29	45	47	41	43	23	25
25-44	34	35	56	59	51	54	29	30
45-64	55	59	92	97	83	88	47	50

Each figure in the above categories is proportional to the number of deaf adults on file in the NAD-NYU Register. The sampling rate is 1:40 of those meeting the sampling criteria.

By the end of cut-off period for receiving initial replies, we had received 412 or 34.1 percent of the questionnaires, many of which were undeliverable by the post office. To maintain a sample representative of the deaf population, an additional 300 persons were selected from the Register using the same stratifications and sampling ration as had been used with the initial 1,200 who were selected. The addition increased the overall sample for the survey of deaf persons to 1,500.

The first follow-up was mailed on February 3, and the second follow-up on February 18. As of March 6, 1975, 774 questionnaires had been returned for a 51.3 percent return rate. A third follow-up produced an additional 282 responses and raised the return rate to 70 percent by the end of the data-collection period.

Survey of Deaf Leaders. The majority of deaf leaders included in this survey were identified by the National Association of the Deaf (NAD) most of whom were officers of State Associations of the Deaf. These experts on deafness were included in this study because of their valuable insights into the needs of their constituents.

The number of deaf leaders included was less than anticipated. The National Association of the Deaf which originally estimated 9 leaders per state was only able to provide us with 6 leaders per state (301 names). To the NAD list, the project staff were able to add an additional 83 names, giving a total of 384 individuals representing 85 percent of the original figure of 450. The 384 questionnaires were mailed on January 16, 1975. Again, Graphic Letter Service handled the folding, labeling, inserting, sealing and postage. The original packet contained the questionnaire (CEDA-2), a postage-paid, self-addressed return envelope, and the mail-out envelope. The first follow-up was mailed on February 3, 1975, and the second follow-up on February 18. As of March 6 we had received 218 questionnaires for an 56.8 percent return rate. An additional follow-up in the form of a mailgram was instituted with nonrespondents (see Appendix A). The additional follow-up produced 91 responses raising the overall return rate to 80.5 percent.

Staff members also publicized the assessment at meetings and conferences. A news release was prepared and sent to over 300 publications within the deaf community to alert deaf persons to the project.

Survey of University Extension Programs. A questionnaire was sent to the deans or directors of 119 university extension programs. This one-time mailing produced 83 responses for a 70 percent response rate. The mailing packet consisted of a cover letter and the questionnaire (see Appendix A).

Survey of Agencies. The survey of agencies included directors of state departments of adult education and directors of state departments of vocational rehabilitation. A questionnaire was sent to every state

director of adult education and vocational rehabilitation in each of the 50 states and the District of Columbia, Puerto Rico, Virgin Islands, and Guam. A total of 108 persons was included in the survey of agencies. Two different questionnaires for the survey of agencies were designed: one questionnaire for the directors of adult education (CEDA-3) and one for the directors of vocational rehabilitation (CEDA-4). The design of two different questionnaires was necessary because vocational rehabilitation does not provide direct educational services, but rather purchases these from educational facilities. Copies of questionnaires are included in Appendix A. The initial mailing for the survey of agencies went out on January 14, 1975, the first follow-up on February 3, and the second follow-up on February 18. As of March 6, we had received 76 responses for a 70.4 percent return rate for the survey of agencies. A telephone follow-up was conducted with nonrespondents yielding an additional 14 responses and raising the return rate to 83.3 percent by the end of the data-collection period.

Results from the four questionnaires are shown in Table 4.

Coding A code book was written for each questionnaire. Each questionnaire was coded twice: once by the initial coder, who translated the responses on the questionnaire to numeric codes on a code sheet, and once by a checker, who duplicated the steps of the initial coder to insure the quality and the accuracy of the coding.

After all of the information had been recorded on code sheets, these were keypunched and a 100 percent key verification was performed. In addition, "impossible" and "improbable" checks were made by the computer to detect any error which may have slipped through.[8]

Interviews with Experts on Continuing Education of Deaf Adults.

Interviews were held with Dr. Thomas Mayes, Dean of Continuing Education, Gallaudet College; Mr. Robert Lauritsen, Director of Programs for Deaf Students, St. Paul Technical-Vocational Institute; Mr. Fredrick Schreiber, Executive Secretary, National Association of the Deaf; Dr. Peter Ries, former Director Office of Demographic Studies, Gallaudet College. Each expert was asked questions about resources utilized, numbers and levels of deaf students, comparison of integrated-segregated models, special characteristics of the population they served, funding sources approached and utilized, review of other programs around the country, gaps in current delivery, and criteria for evaluation. The

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[8]These checks consist of a search for impossible combinations (a person's spouse cannot be of the same sex) and improbable combinations (persons over 65 years of age are unlikely to be enrolled in high school). When the computer identifies such instances, a supervisor resolves the likely error by reference to the data source.

Table 4

Summary of Return Rates of Initial Mailing and Follow-ups:
Assessment of Needs for
Assessment of Needs for Continuing Education
of Deaf Adults: 1975

Survey	Initial Mailing			First Follow-up			Second Follow-up			Third Follow-up		
	Sent	Received	Percent	Sent	Received	Cum. Percent	Sent	Received	Cum. Percent	Sent	Received	Cum. Percent
Survey of Agencies	108	37	34.3	71	12	45.4	59	27	70.4	32[a]	14	83.3
Survey of Deaf Adults	1207	412	34.1	1096[b]	218	41.8	878	144	51.3	734	282	70.1
Survey of Deaf Leaders	384	105	27.3	279	65	44.3	214	48	56.8	168[c]	91	80.5
Survey of University Extension Programs	119[d]	83	70.0	-	-	-	-	-	-	-	-	-

[a]Phone follow-up

[b]Includes additional 301 names

[c]Mailgram follow-up

[d]Only one mailing

insights gained from these experts were incorporated into the design of the mail questionnaires sent to directors of vocational rehabilitation, educators and deaf leaders. In addition information was received from the Triangle Schools (Delgado College, Seattle Community College, St. Paul Technical Vocational Institute), project DAWN (Deaf Adults with Need), the Annual Survey of Hearing Impaired Children and Youth, and the National Technical Institute for the Deaf. The information obtained from these sources provided valuable resources and aided in the design of the mail questionnaires.

Interviews with Experts in Media and in Non-Classroom Instruction. Interviews were conducted with Dr. Malcolm Norwood, Branch Chief, Captioned Films and Telecommunications Branch, Bureau of Education for the Handicapped, and with Dr. Howard Quigley, Project Director of CEASD contract for Captioned Films for the Deaf Media Distribution Center, regarding the availability of specialized films and videotape materials suitable for use in continuing education classes. A staff member spent one full day at the National Center for Educational Media and Materials for the Handicapped, in Columbus, Ohio, interviewing key staff members regarding materials for continuing education. From these sources we were able to secure updated catalogues of Captioned Film materials and substantial background information about the Captioned Film services. In addition, contacts were made with national television organizations which provided us with information about suitable materials currently being broadcast.

Chapter V

RESULTS OF SURVEYS

Survey of Deaf Persons. The survey of deaf persons is based upon a mail questionnaire sent to a stratified random sample of the deaf population. The parameters used for the stratification were provided by the National Census of the Deaf Population. A total of 641 valid responses was received.

All persons included in this survey met the definition of deafness set forth above, as measured by Hearing Scale II (Schein et al., 1970), and were deaf prior to 19 years of age. Two hundred ninety-five of the respondents were males and 346 females. All respondents were between the ages of 18 and 64: 162 were in the 18-to-24 age group, 162 were in the 25-to-44 age group, and 317 were in the 45-to-64 age group. One hundred seventy of the males and 201 of the females were married.

The respondents were better-educated on the average than the prevocationally deaf population. Of the male respondents, 41.3 percent had completed less than 12th grade, 35.3 percent had completed high school, and 23.4 percent had completed one or more years of college. For females, 40.3 percent had completed less than 12th grade, 37.8 percent had completed high school, and 21.9 percent had completed one or more years of college. The median years of school completed for both males and females was 12th grade, which is one grade higher than for the prevocationally deaf population.

Approximately 34 percent of the respondents indicated that they had attended a vocational or trade school. Forty-three percent of the male and 28.6 percent of the female respondents had attended a vocational or trade school.

On the average, the respondents tended to be somewhat better-off financially than the population from which they were drawn. About 26 percent of the male respondents had an annual family income under $6,000, 28.2 percent had an annual family income between $6,000 and $9,999, 22.8 percent had an income between $10,000 and $14,999 and 22.8 percent had annual family income over $15,000. For females, 34.4 percent reported an annual family income under $6,000, 23.7 percent had an income between $6,000 and $9,999, 22.1 percent between $10,000 and $14,999, and 19.8 percent had annual family incomes over $15,000. Male respondents had a median annual family income of $9,369, and females $8,632.

Seventy-five percent of the male respondents and 45.2 percent of the females were employed at the time of the survey. Table 5 gives the percent distribution of principal occupation by sex for respondents employed at the time of the survey.

Table 5

Percent Distribution of Principal Occupations of Employed Respondents, by Sex: 1975.

Occupation	Total	Male	Female
All occupations	100.0	100.0	100.0
Professional and Technical	14.6	13.6	16.0
Nonfarm Managers & Administrators	5.8	6.6	4.9
Sales	1.2	1.0	1.4
Clerical	15.2	8.1	25.0
Craftsmen	8.8	13.6	2.1
Operative, Nontransit	25.7	29.8	20.1
Operative, Transit	.6	1.0	-
Laborers, Nonfarm	19.6	18.2	21.5
Farmers & Farm Managers	1.5	2.5	-
Service Workers	6.1	5.6	6.9
Private Household Workers	.9	-	2.1

The majority of deaf persons in this survey (73.2 percent) stated that they would be interested in taking courses if these were offered. The respondents were interested in taking every type of educational course. In response to the question on courses they would be interested in taking, 1,530 choices were given, 733 by males and 797 by females. The distribution by type and sex is summarized in Table 6.

Table 6

Distribution of Courses Respondents Interested in Taking, by Type of Course and Sex of Respondent: 1975.

	Total	Male	Female
All Types	1530	733	797
Avocational Education	693	290	403
Leisure time activities	164	61	103
Improving homemaking skills	119	42	77
Health education	78	36	42
Improving family relations	76	35	41
Bible and religious subjects	73	30	43
Public affairs	68	31	37
Foreign languages	44	26	18
Other avocational	71	29	42
Basic Education	647	334	313
Reading improvement	185	94	91
Writing improvement	175	83	92
Math improvement	131	72	59
Speech improvement	113	58	55
Preparation for high school diploma	43	27	16
Vocational Education	116	71	45
Higher Education	74	38	36

Males selected basic education more often than other courses of interest, and females more often chose avocational. Both male and female respondents did not show much interest in higher education or vocational-education classes.

Interest in taking courses did not vary much by education: 36.9 percent of the courses selected were by respondents who had completed less than 12th grade, 32.2 percent by respondents who had completed 12th grade, and 30.0 percent by persons who had completed one or more years of college. There is an indication that lesser-educated respondents show more interest in taking courses, though the difference is small.

Deaf respondents in the 24-to-44 age group showed less of an interest than respondents in the 18-to-24 or 45-to-64 age group. Approximately 41 percent of the courses selected were by respondents in the

45-to-64 age group, 30.9 percent by respondents in the 18-to-24 age group, and 27.7 percent by respondents in the 25-to-44 age group.

The data show a slight tendency for respondents with lesser annual incomes to have more interest. Thirty percent of the courses selected were by persons whose annual income is under $6,000, 28.9 percent by respondents with incomes between $6,000 and $9,999, 20.1 percent with incomes between $10,000 and $14,999, and 21.2 percent with annual incomes of $15,000 or over.

About 8 percent of respondents had participated in CEDA, on the average, in the last three years. Thirty-two percent of the respondents reported having enrolled in an educational course since they left school or college as full-time students. Approximately 34 percent of the male respondents reported taking a course and 30.9 percent of the female respondents.

Respondents' experience in CEDA appears to be on the increase. Over half of the respondents who indicated that they had taken a continuing or adult education course did so within the past three years. Twenty-nine percent of the respondents who had engaged in CEDA took a course within the past 12 months; 22.9 percent did so 2 to 3 years ago, and 47.8 percent between 4 and 10 years ago. Trade schools and colleges sponsored most of the classes in which deaf adults were enrolled. Table 7 gives the frequency with which agencies were mentioned as sponsoring courses.

Table 7

Frequency of Sponsorship of Educational Courses for Respondents Enrolled in Courses after Leaving School or College

Sponsoring Agency	Frequency
All	188
Trade Schools	54
Colleges	43
High Schools	18
Place of Employment	12
Public Schools	11
Government Manpower Training	9
Cooperative Extension Service	8
Correspondence School	8
Church	7
Clubs for the Deaf	5
Unions	3
Library	2
YM/YWCA or Community	1
TV Station	1
Other[a]	6

[a]"Other" includes: U.S. government (3), hospital training program (1), Leadership Training Program (1), private tutor (1).

Vocational Rehabilitation paid for many of the courses taken by respondents. Respondents reported that VR paid for 40.8 percent of the courses. Respondents themselves paid for 31.1 percent; 16 percent were free courses, and 12.1 percent were paid for by some other means.

In approximately half of the courses taken by respondents, no special provisions were made for deaf students. Of the remainder, 25.5 percent had interpreters, 18.2 percent had instructors who signed, and 6.8 percent had other provisions. The majority of courses in which deaf adults enrolled are for both deaf and normal-hearing adults. Of the respondents who had taken a course, 74.5 percent were in classes which mixed deaf and normal-hearing adults, 16.3 percent had taken courses for deaf adults only, and 9.2 percent had taken both types.

No clear picture developed as to preferences adults have for separate or integrated classes. Separate classes were preferred by 30.7 percent of the respondents, integrated classes with interpreters and notetakers were preferred by 34 percent of the respondents, and 35.3 percent felt there was no difference.

Of the 641 respondents, only 14 had taken a televised course. The course content of the TV offerings varied widely. Two persons reported taking basic education courses, 3 vocational education, 1 higher education, and 1 avocational education. Seven respondents did not report type of course taken. Ten of the 14 respondents who had taken a course by TV reported that special provisions were made for deaf students. Seven of the 10 reported the use of captions, and 3 reported interpreters. Thirteen of the 14 respondents evaluated the course as fair (3), good (6), or excellent (4). One respondent did not give an evaluation of the course.

Thirty-eight of the 641 respondents had taken a course by film. Eleven reported the subject matter was basic education, 8 vocational education, 7 higher education and 8 avocational education. Four did not respond to type of course. Special provisions for deaf students were made in 25 of the 38 courses reported. Fifteen respondents reported the use of captions, 9 respondents reported the use of interpreters, and 1 respondent reported the use of other provisions. Thirty-seven of the 38 respondents evaluated the courses by film as fair (8), good (21), or excellent (8). One respondent felt the course by film was poor.

These responses may include courses in which television and film materials are secondary rather than primary elements in conveying course content. The majority of deaf persons who expressed a preference for method of educational programming preferred regular classes. Table 8 summarizes the preferences for selected methods of educational programming.

Table 8

Preference of Respondents for Selected Method of Educational Programming: 1975

Method	Frequency
All	507
Regular Classes	273
Self Study	40
Correspondence Study	39
Classes on TV	35
Other[a]	3
No Difference	117

[a]Other includes private tutor (2) and classes with film (1).

Only 11 of the 641 respondents reported having been refused admission to a class because of their deafness. Reasons deaf respondents were given for refusal were: no interpreter (3), do not accept multiply handicapped persons (1), too old (1), class uses tapes (1), class based on discussion (1), attention span too short (1), teacher refused to accept deaf students (1), course for hard of hearing not deaf persons (1), and student had reached limit of learning (1).

Table 9

Frequency Organizations Sponsor Continuing Education Classes in Communities in which Deaf Respondent Lives: 1975.

Sponsoring Organization	Frequency
All Reported	1,209[a]
High Schools	187
Colleges	184
Public schools	140
Church	134
Clubs for the deaf	134
Private trade and business schools	93
Government manpower training programs	80
Cooperative extension services	72
YM/YWCA and community centers	66
TV stations	58
Library	42
Other[b]	19

[a]Adds to more than 641 because of multiple responses

[b]"Other" includes: community government (8), private rehabilitation center (6), speech and hearing center (3), department of recreation (1), labor union (1).

Deaf adults reported that high schools and colleges are the most frequent sponsors of continuing education programs in their communities. One hundred eighty-seven respondents said high schools offer continuing education courses and 184 respondents reported that colleges offer courses in their community. Table 9 summarizes the frequency deaf persons reported organizations sponsored continuing education classes in their community.

Respondents reported that the lack of availability of classes for deaf adults and the lack of qualified teachers were the major barriers in preventing them and other deaf adults from attending continuing education classes. Table 10 summarizes the responses to major barriers to continuing education classes as perceived by deaf adults.

Table 10

Major Barriers Preventing Respondents and Other Deaf Adults from Attending Continuing Education Classes: 1975.

Barriers	Frequency
All Reports	1,186[a]
Classes for deaf adults not available	193
Lack of qualified teachers for deaf adults	151
Not a sufficient variety of classes for deaf adults	151
Lack of qualified interpreters	145
Home responsibilities are too great	118
Too tired to go to school after work	114
Feeling that educational classes don't lead anywhere	69
Poor counseling services	68
Reluctant to attend classes with normal-hearing adults	67
Fees are too high	66
Other[b]	44

[a]Adds to more than 641 because of multiple responses.

[b]"Other" includes: classes too far, no transportation (11), too old (9), no desire (8), no time (5), work responsibilities too great (4), poor health (3), no hearing aid (3), can't understand tape recordings (1).

Survey of Deaf Leaders. Most deaf leaders felt that vocational education constituted the highest educational need for their deaf constituents, followed by avocational and basic education. Higher education was considered the least important. The ratings of educational needs of deaf adults by deaf leaders were almost identical to the ratings by state directors of education (see Table 22). There were no shifts in the order of educational needs although the ratings did differ somewhat. Table 11 presents the mean ratings of educational needs by deaf leaders.

Table 11

Mean Rating[a] of Educational Needs of Deaf Adults as Perceived by Deaf Leaders: 1975.

Educational Needs	Mean Ratings
All Needs	3.6
Vocational Education	4.1
Basic Education	3.8
Avocational Education	3.3
Higher Education	3.2

[a]Rating was made on 5-point scale from 1 (no priority) to 5 (very great priority).

A majority of the deaf leaders reported that there was at least one program in their states to meet the educational needs of deaf adults. Approximately half of the leaders reported fewer than 5 programs per state, with the mean number being 6.6 programs. However, the mean number of counties per state is 66.2, indicating the extent of the maldistribution of CEDA programs.

Almost half of the deaf leaders responding to the questionnaire indicated they preferred a combination of classes exclusively for deaf adults and regular classes with interpreters and notetakers to either (a) classes exclusively for the deaf or (b) regular classes with interpreters and notetakers. Responses to this item did differ by leaders who had previous CEDA experience and those who had none. The majority of the former preferred a combination of classes exclusively for deaf and regular classes. The majority of leaders who had no previous CEDA experience preferred classes exclusively for deaf adults. Table 12 gives the distribution of type of course preferred by deaf leaders experienced in CEDA.

Table 12

Percent Distribution of Preferences for Composition of Classes by Students' Hearing Ability, by Deaf Leaders' Experience with Continuing Education of Deaf Adults: 1975

Preferences for Composition of Class	Total	Deaf Leader's CEDA Background	
		Previous Experience	No Previous Experience
Total	100.0	49.6	50.4
Exclusively Deaf	31.3	11.0	20.3
Regular Classes (with interpreters and notetakers)	22.8	8.5	14.3
Both	45.9	30.1	15.8

X^2= 21.28, significant at .01 level

Colleges and clubs for the deaf were reported most frequently as sponsoring CEDA. Colleges were reported 80 times and clubs for the deaf 61 times by leaders as organizations which sponsor CEDA in their communities. Table 13 summarized the frequency which deaf leaders reported organizations and groups sponsor CEDA in their communities.

Table 13

Frequency which Deaf Leaders Reported a Selected List of Organizations and Groups Sponsored Continuing Education Classes for Deaf Adults in their Community: 1975.

Organizations and Groups	Frequency
All Organization & Groups	413[a]
Colleges	80
Clubs for the Deaf	61
Public Schools	43
High Schools	42
TV Stations	32
Cooperative Extension Service	31
Churches	29
Government Manpower Training Program	26
Private Trade and Business Schools	19
YM/YWCA and Community Centers	10
Library	7
Other[b]	33

[a]Adds to more than 271 because of multiple responses

[b]"Other" includes: programs and schools for deaf (11), speech & hearing societies (7), VR (7), private foundation (4), Project DAWN (4).

Most deaf leaders reported the lack of interest by deaf adults and the lack of funding most often as barriers to continuing education programs. From a selected list of barriers to continuing education, leaders were asked to indicate which ones they considered to be a serious problem in their state. Then they were asked to select the barriers they considered to be the major ones. Table 14 gives the frequency with which leaders reported any barriers to CEDA, and Table 15 presents the frequency with which major barriers were reported.

Approximately half of the deaf leaders responding to the questionnaire had previous CEDA experience. The previous experience of these leaders ranged from taking a course to establishing and/or administering a CEDA program.

Table 14

Barriers to Continuing Education of Deaf Adults, as Perceived by Deaf Leaders with and without Previous CEDA Experience: 1975.

Barriers	Total	Leaders With Previous Experience	Leaders With No Previous Exp.
All barriers	1056 (100%)	558 (100%)	498 (100%)
Lack of interest by deaf adults	163 (15.4)	93 (16.7)	70 (14.1)
Lack of funding	161 (15.3)	82 (14.7)	79 (15.9)
Lack of awareness by deaf adults of existing educational opportunities	154 (14.6)	75 (13.4)	79 (15.9)
Lack of teachers who are experienced in teaching deaf adults	134 (12.7)	66 (11.8)	68 (13.7)
Poor academic background of deaf adults	128 (12.1)	73 (13.1)	55 (11.0)
Lack of interpreters	96 (9.1)	57 (10.2)	39 (7.8)
Lack of educational needs of deaf adults	73 (6.9)	32 (5.7)	41 (8.2)
Inadequate communication skills	66 (6.3)	33 (5.9)	33 (6.6)
Lack of suitable materials	50 (4.7)	27 (4.8)	23 (4.6)
Other	31 (2.9)	20 (3.6)	11 (2.2)

[a]"Other" includes: lack of leadership in educational community (12), lack of centralized deaf population (8), lack of publicity (5), high transportation cost (3), lack of time (1), poor vocabulary of deaf (1), lack of understanding in hearing community (1).

Though their experience was limited, deaf leaders had a generally favorable attitude toward film and television as vehicles for CEDA. Eight of the 271 deaf leaders had been involved in CEDA by television. Of those 8 leaders, 2 felt it was not very good or a fair experience, and 6 leaders felt it was a good or excellent experience.

Forty-three of the leaders had taken or been involved in instruction by film. Of the 43 leaders, 10 felt it was not very good or a poor experience, 10 felt it was a fair experience, and 23 felt it was a good or excellent experience.

Table 15

Major Barriers to Continuing Education Programs as Perceived by Deaf Leaders: 1975.

Major Barriers	Frequency
All barriers	368[a]
Lack of interest of deaf adults	96
Lack of funding	83
Lack of awareness of deaf adults of existing educational opportunities	45
Lack of teachers who are experienced in teaching deaf adults	37
Poor academic background of deaf adults	33
Lack of interpreters	20
Inadequate communication skills	12
Lack of educational needs of deaf adults	9
Lack of suitable materials	3
Other[b]	30

[a]Adds to more than 271 because of multiple responses.

[b]"Other" includes: lack of leadership in educational community (12), lack of centralized deaf population (8), lack of publicity (5), transportation cost (3), lack of time (1), lack of understanding in hearing community (1).

Survey of University Extension Programs for Deaf Adults. The following summarizes the major findings of the mail survey of the extension divisions of major public and private universities affiliated with the National University Extension Association and Association for Continuing Higher Education. As mentioned in the methodology section, questionnaires were sent to deans and directors of 119 University Extension programs, including all the state universities and many of the major private ones. Eighty-three of the deans and directors responded, representing colleges and universities in 44 states.

The overwhelming finding of the survey is quite clear: There are very few deaf adults in either credit or non-credit university extension programs. Only nine of the 83 schools indicated that deaf adults were currently or in the recent past enrolled in continuing education credit or non-credit instruction. The combined enrollment of deaf adults in the nine extension programs reporting was under 50: 15 deaf adults were enrolled in non-credit class conducted in one college in the summer of 1974; 3 extension divisions indicated there were "2 or 3" deaf adults enrolled in credit classes, 2 extension division deans said there were "probably a few" deaf adults in the classes; and 2 said there might be some deaf adults enrolled in their correspondence programs. Several

deans indicated that there were many deaf students enrolled in the regular university programs. This survey, however, was concerned only with enrollment of deaf adults in extension divisions.

Only one of the classes reported in the survey (conducted in summer 1974) was exclusively for deaf adults. All other classes were for both deaf and normal-hearing adults. In 3 of these classes, a sign language interpreter was used; in 2 classes students used tape recorders (which were interpreted at a later time), and in the other instances the program was in print (correspondence program) or notetakers were used.

By and large, not only were there very few deaf adults in the continuing education classes, the problem of providing educational opportunities for the deaf adults seemed to be at a very low level of priority for the deans and directors. Almost half of them responded to Question 1 (Are there any deaf adults, etc.?) by "Don't know" rather than "No". Only 3 said their schools had made any special effort to recruit deaf adults and only 3 indicated that they were thinking of plans to increase enrollment of deaf adults.

One dean of an extension division of one of the largest state universities complained, "I have tried offering for several years a course (non-credit) in sign language. Unfortunately, I have been unable to get very much cooperation from vocational rehabilitation, etc., and can not get a clear picture of potential numbers even of deaf in the region. Our class has had only sporadic success."

In part, the low level of priority given to CEDA in university extension programs is explained by the response to Question 4 (Within the past three years has your school been asked by an outside group to schedule programs for deaf adults?) Of the 73 deans and directors who responded to this question, only three said that their schools had been asked in the past three years by an organization of the deaf, by state agencies or by any other group to schedule a program for deaf adults. Two of the three said that in response to the requests, they had organized programs, and the third said he is now planning a program.[9] One of the country's most distinguished leaders in continuing education (a former president of NUEA), who is the dean of one of the largest state university extension programs, wrote, "The extent of this problem had never come to our attention. To my knowledge, in 34 years, we have

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[9]That contact with deaf organizations is not always a guarantee of successful programs is indicated by the dean who said, "They were not a great success because of (a) recruiting which was done exclusively through contact with organizations of deaf, or (b) the organizations of the deaf which developed the programs were not reflecting the real interests of their members."

not had a specific request for programs for the deaf. We are interested."

Sixty of the deans and directors responded to Question 5 (What do you consider to be the major barriers in providing continuing educational opportunities for the deaf?), and almost two-thirds of them (38) said a major barrier was the school's lack of qualified faculty for teaching deaf students. Thirty-five said they were unaware of the educational needs of deaf adults, 18 said the inability to provide adequate counseling and guidance was cited as a major barrier. Unawareness of the school's program by the deaf was listed as a major barrier by 13 deans, and the same number cited the lack of government funding for special programs as a major handicap.

One dean of a state university extension program noted that his reason for not having classes for deaf adults was, "Our classes are on a pay-as-we-go basis. We do not here have numbers of deaf necessary to give special continuing higher education classes."

Table 16 shows the responses to major barriers to CEDA by deans and directors.

Table 16

Major Barriers to Continuing Education for Deaf Adults, as Perceived by Deans and Directors of University Extension Programs: 1975.

Barriers	Frequency[a]
Total Respondents	60
Lack of qualified faculty	38
Unawareness of deaf adults' educational needs	35
Inability to provide adequate counseling and guidance	18
Unawareness by the deaf adults of program	13
Lack of government funding	13
Inability of deaf adults to participate in discussion	7
Difficulty in recruiting deaf students	7
Inability of deaf adults to pay tuition	3
Psychological/emotional problems of deaf adults	2
"Disruptiveness" of interpreters in regular classes	2
Insufficient numbers of deaf adults in area	2
Greater commitment to other areas of service	2
Anticipate substantial problems	1

[a]Does not add to 60 because some respondents gave more than one response.

State Directors of Adult Education. Of the 54 questionnaires mailed, 32 valid responses were received. Thirteen or 41 percent of the state directors of adult education who responded to the survey indicated that their state made special provisions to meet the continuing education needs of deaf adults. Four of the remaining 19 directors said their state is planning to provide continuing education to deaf adults by the fall of 1975. The special provisions being provided are summarized in Table 17.

Table 17

Special Provisions for Continuing Education of Deaf Adults, by States which Have CEDA Programs: 1975.

Provisions	Number of States
Provide CEDA	13
Provide specially trained interpreters, teachers and counselors	13
Fund special CEDA projects	11
Fund and supervise public school and/or college programs for CEDA	9
Provide consultation and technical assistance to schools and organizations providing CEDA	8
Prepare special materials	7

Two hundred twenty-nine CEDA classes were reportedly established and operating in the 13 states with programs. Table 18 gives the distribution of classes by sponsoring agency. Classes are also broken down by those exclusively for deaf adults and regular classes in which deaf adults are enrolled. Colleges and universities provide the most classes with 148. No state director reported on cooperative extension services.

The 229 classes enrolled 1,008 deaf adults. This averages approximately 5 deaf students per class, a very small class size. Of the deaf adults enrolled, 412 (40.9 percent) were in basic education courses, 24.4 percent in avocational courses, 22.6 percent in vocational courses and 12.1 percent in higher-education courses. The distribution of deaf adults enrolled in the different types of educational programs by sponsoring agency is summarized in Table 19.

Table 18

Separate and Integrated Classes, by Sponsorship in the 13 States which Provide Continuing Education for Deaf Adults: 1975.

Sponsoring Agency	Class Composition		
	Total	For Deaf Only	For Deaf & Normal-hearing
Total	229	84	145
College and universities credit (degree) classes	112	12	100
Non-credit classes	36	12	24
Proprietary and trade schools	35	20	15
Special school for the deaf	29	27	2
Public schools	10	7	3
Voluntary and community organization	6	5	1
Unspecified	1	1	-

Most of the reporting states (87.7 percent) reported fewer than 5 CEDA programs, while the mean number of counties per state is 55.6. This indicates that the majority of the deaf adults in a state do not have ready access to a program. However, one state claimed it had a program for deaf adults in every county, and another reported programs in 40 percent of its counties.

Table 19

Number of Deaf Adults Enrolled in Educational Programs, by Sponsorship of States Which Provide Continuing Education for Deaf Adults: 1975.

Sponsoring Agency	Educational Program				
	Total	Basic	Higher	Vocational	Avocational
Total	1,008	412	122	246	228
Coll. & universities	491	93	119	121	158
School for the deaf	247	180	-	67	-
Public schools	175	94	3	43	35
Voluntary & comm. organization	35	35	-	-	-
Proprietary & trade schools	30	-	-	15	15
Unspecified	30	10	-	-	20

The majority of states which have programs established or which are planning programs have special requirements for teachers of deaf adults. Of the 17 directors who responded that they have programs or were planning programs, 11 said they have special requirements for teachers of deaf adults and 6 said they have no special requirements. The special requirements are summarized in Table 20.

Table 20

Special Requirements for Teachers of Deaf Adults, Reported by Directors of Adult Education Who Have Established or Plan to Establish Programs for Deaf Adults: 1975.

Requirement	Frequency
All requirements reported	11
Manual communication	4
Certification	3
Course work in deafness	3
Manual communication, certification, course work in deafness	1

Seven states did not use counselors in CEDA programs. For the 10 states that reported using counselors, 5 required that the counselors have taken courses in deafness and manual communication, 4 required manual communication and 1 reported no special requirements for the counselors. Less than half of the state directors reported that interpreters are required to have certification by the Registry of Interpreters for the Deaf. Only six states required that interpreters have certification, 8 reported that they did not require certification, one official did not know, and 2 directors did not respond to the question.

Table 21

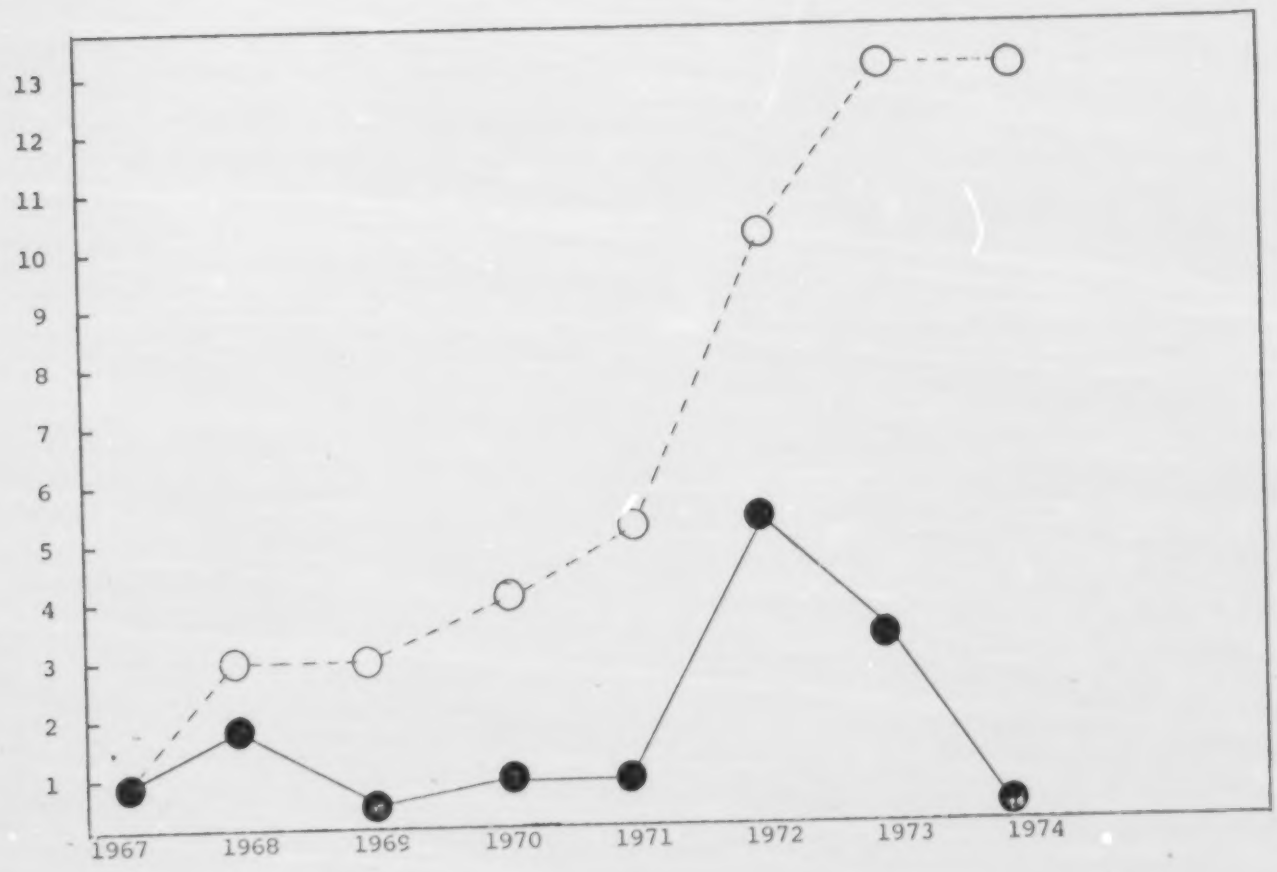
Number of Years State Directors of Adult Education Reported CEDA Programs Established: 1975.

Years	Frequency
Total Number of Programs	13
1 year	-
2 years	3
3 years	5
4 years	1
5 years	1
6 years	-
7 years	2
8 years	1

No state reported classes for deaf adults established for more than 8 years. Table 21 gives the distribution of responses by the number of years classes have been established, and Figure 1 gives the cumulative and annual number of new programs for the same period.

Figure 1

Cumulative and Annual Number of New CEDA Programs Established by Year: 1967-1974



----- Cumulative

——— Incidence

Most directors of adult education felt that vocational education constituted the highest educational need of deaf persons in their state, with basic education second, then avocational education and higher education last. On a 5-point scale the directors were asked to rate the educational needs of deaf adults in their states. The scale ranged from 1 (no priority) to 5 (very great priority). Table 22 presents the mean rating by type of educational program.

Table 22

Mean Rating[a] of Educational Needs of Deaf Adults, by Directors of Adult Education: 1975

Educational Needs	Mean
All Needs	3.6
Vocational education	4.2
Basic education	3.8
Avocational education	3.3
Higher education	3.0

[a]Rating was made on a 5-point scale with 1 (no priority) and 5 (very great priority).

Deaf adults frequently see themselves in need of continuing education. Sixty-three percent of the 32 directors responding to the questionnaire said that they had received requests for classes or programs for deaf adults during the past 12 months. The remaining 37 percent said they had not or did not know if a request had come in. Table 23 summarizes the source of the request.

Table 23

Percent Distribution of Source of Request for Continuing Education Programs for Deaf Adults: 1975

Source of Request	Mean
Total	100.0
Individual	15.0
Group	35.0
Both group & individual	50.0

The majority of state directors see lack of funding and lack of qualified teachers as the most frequent barriers to continuing education for deaf adults. Table 24 summarizes the responses to barriers to continuing education of deaf adults as perceived by state

ACE directors.

Table 24

Barriers to Continuing Educational Programs for Deaf Adults, as Perceived by State Directors of Adult Education: 1975

Barriers	Frequency[a]
All Barriers	134
Lack of funding	22
Lack of qualified teachers	21
Lack of awareness by deaf adults of existing educational opportunities	16
Lack of interpreters	14
Poor academic background of deaf adults	11
Inadequate communication skills	10
Lack of suitable materials	9
Academic	9
Lack of educational needs of deaf adults	7
Lack of interest of deaf adults	7
Other[b]	8

[a]Adds to more than 32, because of multiple responses.

[b]"Other" includes central locus of deaf population (1), lack of understanding by bureaucracy (1), lack of interest by deaf educators (1), lack of private tutoring (1), lack of signs which apply to technical vocabulary (1), desire of deaf to separate themselves from hearing world (1), not specified (2).

The state directors were asked to rank the above barriers as to their severity in limiting CEDA. The replies are summarized in Table 25.

Table 25

Major Barriers to Continuing Education Programs for Deaf Adults, as Perceived by State Directors of Adult Education: 1975

Major Barriers	Frequency[a]
All Barriers	47
Lack of funds	13
Lack of awareness by deaf adults of existing educational opportunities	8
Lack of interest of deaf adults	5
Lack of qualified teachers	4
Lack of interpreters	4
Inadequate communication skills	4
Poor academic background of deaf adults	2
Lack of materials	1
Other[b]	6

[a]Adds to more than 31 because of multiple responses.

[b]"Other" includes; deaf adults not in central area (1), lack of understanding by bureaucracy (1), lack of interest by deaf educators (1), need for tutoring services (1), desire for deaf to separate themselves from hearing world (1), not specified (1).

The majority of states report the regular use of TV or CATV programs in continuing education. Fifty-nine percent of the 32 state directors stated that their states use television programs in their ACE programs. Of the 19 states reporting use of television in ACE programs, 11 used ETV (educational television), 4 used PBS (Public Broadcasting Service), 1 used ITV (instructional television), 1 used commercial TV and one reported using another type of specially dedicated channel although it was not described.

Although the majority of states reported the use of television in their ACE programs, only 4 states reported modifying their programs for deaf viewers. Two states reported using captions and 2 reported using interpreters. Four other states reported that there are current plans to modify some of their television programs to accommodate deaf viewers.

As with television, the majority of states reported the use of film programs in ACE. Twenty-two of the 32 states reported using film programs. The remaining 10 reported that they did not. Film programs followed the same pattern as television programs when it came to deaf viewers; only 4 of the 22 states using film programs modified for deaf viewers. Three states used captions and the other used an interpreter.

Of the 18 states that used film programs which are not modified for deaf viewers, only 1 stated any present plans for modifying the films.

Table 26

Mode of Circulating Television and Film Programs within States: 1975

Mode of Circulation	Frequency
All reported	18
State Universities	5
Library Facilities	4
Federal Agencies (Media Services and Captioned Films)	2
Other[a]	7

[a]"Other" includes: private rentals (1), Gallaudet (1), schools for the deaf (1), adult education program (1), state educational television network (1), technical school (1), state department of education (1).

Whereas television and films were reported to be used by a majority of states in ACE, other innovations---extension courses, cassette videotapes, correspondence courses and universities without walls---were reported to be less popular. Table 27 summarizes the frequency of their use.

Table 27

Frequency of Selected Innovation Modes of Education Used by States, as Reported by State Directors of Adult Education: 1975

Modes	Frequency
All innovations reported	25
Extension courses	10
Cassette videotapes	8
Correspondence courses	4
Universities without walls	3

The allocation of monies for deaf adults in continuing education is nonexistent in most states. Only 7 directors reported that their state budget made a financial provision for CEDA. Similarly only 8 directors reported that there is an office within their state that

has the responsibility for continuing education of deaf adults.

From directors of vocational rehabilitation, 50 valid responses were received. Since vocational rehabilitation (VR) agencies do not provide direct educational services, the questions centered around the types of educational services VR agencies purchase for their clients.

The majority of state VR directors indicated that their states purchase all types of educational services. Services which could be authorized ranged from 50 for vocational education to 29 for avocational education. Higher education could be authorized by 49 states and basic education by 45. Table 28 summarizes the educational services which can or cannot be authorized and the mean number of clients per state who were provided that service.

Table 28

Educational Services which Can or Cannot Be Authorized by Vocational Rehabilitation Agencies and the Mean Number of Clients Who Were Provided Service: 1975

Educational Service	States Which Authorize	States Which Cannot Authorize	Mean Number Students Served Per State Authorizing
Basic Education	45	5	60
Higher Education	49	1	47
Vocational Education	50	-	123
Avocational Education	29	21	104

Ninety-eight percent of the directors reported that their states could pay for tuition and interpreting for deaf clients. Ninety-six percent said that tutoring costs could be reimbursed, and 92 percent could pay for notetaking. Table 29 provides a breakdown of selected services for which VR can or cannot authorize payment for deaf clients enrolled in educational programs.

Table 29

Selected Services for which VR Can or Cannot Authorize Payment for Deaf Clients Enrolled in Educational Courses: 1975

Selected Services	Number of States for which Payments				Non-Response
	Total	Allowed	Allowed Provisionally	Not Allowed	
Tuition	50	40	9	-	1
Interpreting	50	40	9	-	1
Tutoring	50	35	13	1	1
Notetaking	50	31	15	1	3

Over half of the directors stated that counselors are provided with a list of facilities authorized to provide educational services for deaf clients. Twenty-nine VR agencies provide counselors with a list of facilities and 21 do not. Of the 29 agencies which provide counselors with a list of facilities, 19 reported that the list is available to the public.

Forty percent of the VR agencies maintain a list of qualified interpreters. Fourteen percent stated that they do not, and the remainder of the directors did not respond to this item. In authorizing the purchase of interpreter service most states have developed their own list of qualified interpreters based on information from various sources. Table 30 summarizes the policies of VR agencies in authorizing the purchase of interpreter services.

Table 30

Policies of VR Agencies in Authorizing the Purchase of Interpreter Services: 1975

Policies	Frequency[a]
Number of states reporting	50
No policies regarding interpreter qualifications	14
Agency developed its own list of qualified interpreters based on information from various sources	24
Interpreters must be approved by one or more counselors on staff who are capable of assessing interpreter skills	14
Interpreter must be certified by RID	12
Interpreter must be member of RID	9
Do not reimburse interpreter expense	1
Other[b]	17

[a]Adds up to more than 50 because of multiple responses.

[b]"Other" includes: encourage certification but not mandatory (5), prefer use of RID, but very few registered interpreters available (4), no interpreters available (2), counselors do interpreting (2), state association of the deaf provides list (1), interpreters from regional resources list (1), interpreters selected from university training program (1), interpreter selection is left to client (1).

Survey of Instructional Technology for Deaf People. The following material derives from the interviews with experts in media, including mediated approaches to educating handicapped persons. To preserve confidentiality, the sources of the statements are not cited. The virtue of anonymity outweighed in our minds the loss of prestige which would have been accorded the various ideas, if attributed. This section, then, condenses the opinions of experts who were personally interviewed and to whom we are deeply grateful together with information culled from the literature.

As used here, the term "instructional technology" or simply "technology" refers to those elements in an instructional system which transfer knowledge or information to the students. These elements, as used in ACE courses, include both the hardware (the actual media devices) as well as the software (the materials which are carried by these devices). Properly applied, instructional technologies can improve the quality as well as quantity of ACE courses available to deaf students.

In order to explore the effectiveness of ACE courses in communicating with deaf students, it is convenient, first, to divide ACE courses into those courses designed for hearing students versus those designed especially for deaf students. Further divisions can then be made according to the particular use of instructional technologies in the courses. Four general categories are classroom courses without media, classroom courses with media, non-classroom courses, and courses developed especially for deaf students.

Classroom courses without media. In spite of an increasing interest in educational technology, the typical ACE classroom course still relies primarily upon spoken words, whether in the form of a lecture delivered by an instructor or in the form of a seminar discussion between an instructor and his or her students. Deaf students find it extremely difficult or even impossible to understand such presentations. Unless some form of direct assistance is provided for the deaf students, they are partially or totally excluded.

One of the most common forms of assistance in such courses is the help of a sign language interpreter, who translates the spoken information into manual signs. Skilled interpreters, however, are very difficult to find in most areas of the country. And in any case, interpreter fees add to the cost of instruction. Other, more modest forms of assistance include asking the instructor to provide advance copies of lectures, arranging for a hearing student to take comprehensive written notes, or making audio recordings of the lectures for later transcription by a hearing person.

Classroom courses with media. The percentage of ACE courses which utilize instructional technologies is increasing steadily in relation to non-mediated ACE courses. Though the percentage is still relatively modest, its impressive growth has prompted the Carnegie Commission on Higher Education to cautiously predict a continuing or even accelerated

growth in the future. A Commission report, The Fourth Revolution; Instructional Technology in Higher Education (1972) states:

> Although traditional institutions may employ the new technologies for only 10 to 20 percent of their instruction by the year 2000, extramural education may use them for up to 80 percent of their instruction.

This prediction may be a mixed blessing for deaf students. As opposed to a live instructor who usually delivers a lecture orally, many of the modern instructional technologies present information using a strong visual component. Since sight is the deaf student's primary means of receiving information, this visual component can be of tremendous benefit. Film and television materials, for instance, have strong visual components.

However, most of the modern technologies that have prominent visual components also have important audio components. In the case of film, television, and slide-tapes, the audio portion is usually an integral, if not crucial, part of the material. Other strongly visual technologies, such as photographic slides or overhead projections usually rely upon the narration of the lecturer---who may be visually hidden by the darkness of the classroom.

Though most of these new technologies can be adapted by translating the audio information into clearly visible displays, even this does not necessarily permit the deaf student to follow all parts of any given course. In fact, this software usually constitutes only a modest portion of most mediated courses. Nevertheless, the visual supplementation of films, television, and even slides and overhead transparencies can often make an important difference in the accessibility of a course to deaf students.

In most cases, though, little attempt will be made to modify ACE software materials. Instructors rarely have the time, the resources, or the expertise to modify the materials. Producers and distributors are not readily attracted to modifying their materials to reach the market of adult deaf students---a market which for major producers and distributors is a comparatively limited one. Paradoxically, the result is that ACE courses with strong media components may be even less accessible to deaf students than the traditional lectures.

There is a pressing need, then, for the development of new methods for visually supplementing traditional media software at the classroom level, so that teachers are not intimidated by the technologies. And there is a parallel need for encouraging the visual supplementation of materials at their source of production. To develop resources in this second group, producers and distributors must be encouraged to begin to visually supplement at least some of their programs. Independent facilities (such as Captioned Films) must also be encouraged to caption important ACE materials.

Non-classroom courses. This third category of ACE courses includes three basic modes for delivering information---by electronic telecast, by mail, and by programmed instruction.

A. Electronic Telecast. Television and radio are the two most commonly recognized mediums of electronic telecast. People understand immediately that radio transmits only audio information and that television transmits both audio and visual information. Few people understand, however, that the different types of distribution systems used for transmitting these radio or television signals may greatly affect the content and the cost of the programs which are carried.

Most radio and television programs are "broadcast." That is, they are transmitted from a tall transmission tower out over the air on federally licensed frequencies or channels. These signals can be received by all standard radio or television receivers which are within the broadcast radius of the tower and which are tuned to the proper frequency or channel.

A second major type of transmission system uses a direct wire connection from the transmitter to the final receiver as the transmission medium rather than the air. Reception of the signals transmitted in this manner is limited to those receivers which are directly connected to the transmission wire. The most common forms of wire-delivered radio or television signals are closed circuit television (CCTV) and cable television (CATV).

The following six categories represent various mixes of program content (television vs. radio) and distribution systems (over-the-air broadcast vs. wire-delivered service).

(1) Television Broadcast (Commerical). The most widespread form of television broadcasting is, of course, commercial broadcasting, such as that of the three major national networks. The prime example of ACE programming on commercial television is the CBS-TV series "Sunrise Semester" which offers formal academic credit through the New York University School of Continuing Education and around the country through cooperating local colleges and universities. Another example, though offered without formal credit, is NBC-TV's "Knowledge" programs, which recently featured a series of ten programs on sign language instruction which was co-produced by the Deafness Research & Training Center.

(2) Television Broadcast (Non-profit). The second most common form of television broadcasting is non-profit broadcasting. Individual stations are usually affiliated with the national Public Broadcasting Service (PBS) or with a local or statewide instructional television network. A famous example of continuing education coursework presented over non-profit television is Chicago's

TV College, which is broadcast as an extension service of Chicago City College. The Chicago City College, incidentally, regularly enrolls homebound students who are chronically ill or handicapped.

(3) Television Broadcast (ITFS). The third category of television broadcast is a lesser known form of television known as ITFS or Instructional Television Fixed Service. ITFS broadcasts, because of the nature of their special broadcast frequency and their limited transmission power can be received only by special television receivers. These receivers are typically placed in public meeting rooms or classrooms around the city so that students can view the broadcasts. ITFS is often used by large public school districts to transmit instructional programming to several schools simultaneously. Stanford University regularly broadcasts courses via ITFS to several cooperating companies for the benefit of employees who wish to upgrade their current skills, but who cannot afford to take the time away from their jobs to travel to and from the campus.

(4) Television By Wire (CCTV). Closed circuit television transmission (CCTV) has become a mainstay for school and college campuses where television interconnection of facilities is important. Depending upon the sophistication of the CCTV system, there may be a single transmitter location called a headend, or there may be several. Typically, there is a central studio production facility associated with a central transmission location. A central production facility permits the transmission of live as well as pre-recorded materials to receivers throughout the campus. However, a growing number of systems also have the capability of originating live (or prerecorded) materials from any of several remote locations around a campus, such as classrooms.

(5) Television By Wire (CATV). Cable television (CATV) is a fast growing industry which currently connects nearly 10 percent of the television homes in the nation (about 6 million homes) and is immediately available to an additional 10 million to 20 million homes. The large capacity wire and line amplifiers of cable make it possible for newly-built cable television systems to carry virtually as many television channels into the home as the market might demand. Broadcasters on the other hand, because of problems of frequency interference, are strictly limited by the physical nature of the broadcast spectrum to a relatively few powerful broadcast channels in any geographical area. Most new cable systems have the capacity for at least 24 separate television channels and have provisions for limited two-way response from the subscriber back to the transmitter headend. The rapid development of satellite interconnections for linking cable systems anticipates the

possibility of national networks for cable programming within the year. Typical installation fees for cable are about $10 to $15 and monthly subscriptions are about $8 to $18 depending upon the nature of the total cable services, which may include a special movie package.

(6) Radio Broadcast (AM-FM). Conventional radio broadcasting offers important opportunities for instructional programming. The most famous example is probably the radio programming sponsored by the "Open University" in England. In the United States there is comparatively limited use of radio for instructional purposes though there is serious consideration by the Corporation for Public Broadcasting to develop the potential of the non-profit National Public Radio network (NPR) for continuing education programming.

The limitations of radio for deaf people are immediate and obvious, though demonstrations have shown that it is technologically feasible to transmit coded radio signals in such a way that they can be received and decoded by a teletypewriter machine which prints out the messages on paper.

B. Mail. The next method, sending course material through the mail, is one of the oldest and most common distribution methods for ACE. This method could be made particularly attractive to deaf students because all the information is presented visually, in either printed or in graphics form. The low cost and comparative success of the technique have prompted the establishment of extension programs by many major colleges and universities, especially the midwestern land-grant institutions. Mail delivery is also the sustaining technique for the many independent correspondence schools around the country which specialize in "self improvement" and vocational courses. The primary current limitation of the course is that language levels may be uncomfortably difficult for many deaf adults.

The Captioned Films program supported by BEH/OE/DHEW is a remarkable demonstration of a distribution system based entirely upon the mails. Specially captioned versions of educational and entertainment films are mailed to local clubs and organizations of deaf people around the country for their private use. This existing framework could easily be expanded to circulate CEDA programming as well.

Two new technologies, the videotape cassette and the videodisc, promise additional formats for future distribution.

C. Programmed Instruction. The final group of non-classroom courses involves the materials and technologies of programmed instruction. In its simplest form, the programmed instruction material is a book of questions which permits self-paced instruction and which requires

the active participation of the student. Immediate reinforcement is provided by confirmation or correction according to accompanying answer materials. Depending upon the format of the book, a student may be directed along a branched network of questions and answers, the progress of which is determined by successive responses. In other books the progress will be sequential, regardless of previous responses.

Programmed instruction techniques have also led to the development of a variety of mechanical and electro-mechanical teaching machines and to use of the computer as a direct teaching resource. These teaching machines, as well as programmed instruction books, seem appropriate for use with adult deaf students, particularly if the materials rely on printed language or graphics and if the reading level is within the range of comprehension of the deaf students.

At present, programmed instruction accounts for only a very tiny portion of ACE activity. Nevertheless, it may become very important in the future, depending upon which types of telecommunications delivery systems are used to carry it to the students.

(1) Electro-mechanical; (Project LIFE). In this and in similar systems, the user responds to information and multiple-choice questions by pressing answer-coded buttons. The program text is typically a sequential series of questions and answers which advance step by step until the lesson is completed as the user provides the correct responses. In some devices, limited branching and review are possible.

(2) CCTV or other Closed Circuit; (CAI). CCTV or other closed circuit lines, connected in much the same manner as an audio language laboratory, provide the student with limited access to a distant computer, which handles the student's instructional program. Computer assisted instruction (CAI) programs vary greatly in content and in methodology from location to location.

(3) CATV or Cable Television; (TICCIT). The TICCIT system, designed and administered by the MITRE corporation, relies upon existing cable television systems which have a central computer. TICCIT has the capacity for one-way as well as limited two-way instruction and includes the provision for a user to "freeze" a selected frame of information on the screen. Depending upon the configuration of the home terminal, the user may request and receive a variety of services, including traditional types of programming.

D. Broadcast Television (Data-Dot). The Public Broadcasting Service is currently experimenting with a system developed by the Atlantic Research Company, which combines the limited, immediate feedback of electro-mechanical devices with the full video programming

of standard television broadcasting. Digitally encoded answer signals are transmitted by the television program as a tiny flashing dot on the face of the screen. The student attaches a small keyboard terminal to the screen using a suction cup and long wire. As multiple-choice questions are presented in the program, the student responds by using the buttons on the keyboard. A display on the keyboard immediately indicates whether the student has responded correctly or incorrectly.

E. Telephone (Project PLATO). Standard telephone lines routinely link remote computer terminals to central computers. One of the most outstanding examples of programmed instruction in the country is Project PLATO at the University of Illinois, which provides extensive computer-based instruction over telephone lines. By using telephone lines, the project can connect student users from all around the state into a single central computer, rather than being limited to a small geographic area as are all other systems.

Courses developed for deaf students. The previous three sections have been devoted to courses which have been developed for hearing students and which may or may not have been adapted effectively for deaf students. This section is concerned with how courses can be developed from scratch to meet the needs of deaf students. This section is not limited to a discussion of instructional technologies *per se* nor to their immediate uses. Rather, it is concerned with how these instructional technologies fit into the larger process of planning and preparing an entire course. For lack of a better term, this planning process can be called "educational technology," as distinguished from "instructional technology" which refers more to specific hardware and software materials.

The distinction between instructional technology and educational technology is much more than a semantic one. It reflects basic differences in philosophy and approach. The four basic components of the larger process of educational technology are: defining course objectives, structuring the subject matter, selecting the appropriate instructional technologies, and developing suitable evaluation procedures.

This last component, effective course evaluation, is especially important because subsequent courses are often approved or disapproved on the basis of the evaluations of previous courses. Unfortunately, these measurements are very often incomplete or misleading. Typically, either the courses have been defined only vaguely or incompletely, or the evaluations have been somehow neglected.

The two typical kinds of evaluation measures are "costs" and "effectiveness." It seems to be surprisingly difficult to measure the various costs associated with courses which have extensive utilization of instructional technologies. This is especially true when generalizations are made about costs over a broad range of courses or instructional technologies. For example, cost per student hour for a particular

technology in one location may be based upon unrealistic full-capacity technology, whereas in another location it may be based upon actual, often minimal, usage. Some adjustments can be made for variations in accounting procedures between courses or institutions, of course, but the resulting hypothetical models are by no means infinitely flexible.

In spite of these severe limitations, the Carnegie Commission on Higher Education included in its report, The Fourth Revolution, a rough guide to comparative costs of seventeen of the most common instructional technologies. (See Table 31.)

Table 31

Questions to be Answered in Determining Costs and Characteristics of Various Instructional Media

1. Can user carry it around?
2. Can user use it individually at school or college?
3. Can user use it individually at home?
4. Can user determine when it is to be used?
5. Can user control rate of information flow and repeat if not understood?
6. Can user interact actively with input?
7. Is individualized "branching" possible?
8. Which senses are used (sight or hearing)?
9. Can signals be sent on electronic network?

Adapted from Miller (1971).

Measurements of the effectiveness of course materials are usually more elusive than measurements of costs. Typically, this is because specific objectives are not often clearly defined for courses and/or because evaluations are inappropriate or incomplete.

Combining the measures of cost and of effectiveness into "cost-effectiveness" usually leads to even greater misunderstandings.

The problems associated with evaluation are stressed here because it is extremely important that improved guidelines be established for developing new courses and new course materials for deaf students.

Production Resources. Considerable expertise in producing and/or modifying materials for deaf people has been developed within the national network of agencies, programs, and schools supported by the BEH/USOE/DHEW. This is particularly true of the office formerly known as Media Services and Captioned Films and recently renamed Media Services and Telecommunications. The activities in this office are divided roughly between services to school-age students and services to adults. The services to the students are provided through schools

for the deaf in each state and through a newly restructured national network of resource facilities for media and materials which are designed to serve all types of handicapped students. This network of facilities is headed by the National Center for Educational Media and Materials for the Handicapped (NCEMMH) at Ohio State University, and includes a specialized center for deafness at the University of Nebraska (S_2).

The services to adults are provided principally through the captioning and distribution of entertainment and educational films and through support of two major captioned-television projects: the "Captioned ABC Evening News," produced by WGBH-TV, Boston, and the "Captioning for the Deaf" project supervised by PBS, which includes the development of techniques for producing and broadcasting unobtrusive ("closed") captions.

The development of this expertise has required a major, sustained effort, supported by the expenditure of tens of millions of dollars over several years. Unfortunately, the recent extensive restructuring of the national network has required the discontinuation of several major production teams which in the past have generated a steady supply of new materials or newly modified materials for deaf people. It is theoretically possible that the bulk of these production responsibilities could be assumed by NCEMMH and by S_2. However, the current mandate for the two centers requires that actual production be avoided. Instead, the two centers are instructed to concentrate on identifying and evaluating existing materials and on preparing production guidelines for use by outside producers.

This restructured network places a considerably heavier production responsibility on the resource centers (Area Learning Resource Centers and Regional Resource Centers) which are located at the local and state levels. These resource centers are expected to fill or partially fill the media needs of schools for the deaf nationally. However, there seem to be no clearly defined corresponding facilities in this new network which could supply production support for CEDA.

Chapter VI

DISCUSSION OF FINDINGS

The various surveys were designed to interdigitate into a comprehensive portrait of CEDA. In simplest terms, this project sought to determine the demand (or need) for CEDA and the status of resources to meet the demand. Neither aspect is simple, however. What is more they interact with each other: facilities tend to grow in response to perceived desire for them. The results reported in the preceding section, then, should be considered in relation to temporal context: The future fulfillment of deaf persons' educational needs will alter their requests for adult education, which will, in turn, affect the nature and number of resources allocated to CEDA.

In this chapter, we will first take up the needs and desires of deaf persons for continuing education. The review of past and near-present data will lead us to project the demand for CEDA into the near future. We will then turn to a discussion of the resources to meet deaf adults' continuing educational needs. Matters of cost and financing will be dealt with, along with consideration of developments in educational-service delivery which can be anticipated.

The Need and Demand for CEDA

At this point, it is well to remind the reader of the definition of the target population for this study: Prevocationally deaf people are those who cannot hear and understand speech. They are distinguished

from other deaf persons by the fact that they lost their hearing ability for speech before they became 19 years of age. The deaf population is part of the largest group of chronic physical disabilities in the United States---the hearing impaired. While this study concentrates its attention on the small segment of that large category, its findings have some implications for all deaf persons and, to a lesser degree, all who are hearing impaired. It is therefore important to bear in mind the sizes of the three groups (see Table 32).

Table 32

Prevalence and Prevalence Rates for Hearing Impairments in the Civilian Noninstitutionalized Population, by Degree and Age at Onset: United States, 1971

Degree	Age at Onset	Number	Rate per 100,000
All Hearing Impairment	All ages	13,362,842	6,603
Deafness	All ages	1,767,046	873
Deafness	Prevocational	410,522	203

Source: Schein and Delk, 1974

The more dependent ACE is on hearing the less available it becomes for a substantial portion of the population. For those who are deaf, programs wholly received through the ear cannot be taken. A lecture, for example, can become available to deaf adults by translation to a visual mode---print, manual communication, lipreading. In its actual state, however, the lecture imposes, by definition, an insurmountable barrier to those who are deaf.

Because the early deafened person usually has language problems accompanying hearing loss, this study focuses on these severely disabled persons. The findings will apply, nonetheless, to all deaf persons to some extent. Unfortunately, as of now, we know far more about prevocationally deaf persons than about the larger deaf population of which they constitute about one quarter. It makes better sense, for that reason as well, to limit this investigation to the prevocationally deaf segment.

Characteristics of Deaf Adults. In drawing up a composite deaf adult (ages 18 to 64 years), there is a tendency to overlook variability. Let it be repeated here, then, that deaf persons vary widely in every characteristic, except hearing ability.

Our sample eliminated deaf persons who had less than six years of school. Accordingly, the median educational attainment of the present sample (12th grade) exceeded that of the total deaf population by a

full grade. The present sample has nearly the same grade attainment as the general population, but the numerical similarity masks a qualitative difference. A normal-hearing person completing 12 years of regular schooling probably achieves more educationally than a deaf person with the same grade equivalent. The average deaf person in grade 12 reads at a tested level below fifth grade (Annual Survey of Hearing Impaired Children and Youth, 1969, 1972). Other discrepancies from standard, in terms of mathematics, social studies and language achievement, are equally dismal on the average. Some deaf adults do complete college, and a few earn advanced degrees. Over half of the prevocationally deaf population, however, is undereducated. Their need for CEDA becomes manifest in view of the changing economic picture.

Even now, earnings of deaf adults average less than their normal-hearing counterparts. Again, some deaf adults' earnings exceed national averages for the general population; the majority do not. The educational and economic pictures coincide.

Because so many deaf adults presently hold jobs as craftsmen and machine operators, there is grave concern for their future. The projection of labor-market trends points to a decline in demand for many of the occupations in which deaf persons presently congregate. Retraining will be necessary for many deaf adults, in order to maintain employment in the coming decade. Furthermore, many growing occupations now require postsecondary education. For deaf adults with less than high-school achievement, CEDA may be critical to their employment security.

Interest in CEDA. Nearly three quarters of the prevocationally deaf sample stated an interest in additional education. The range of their interests extended across all choices, but centered on basic and avocational education (see Table 6). Very little interest was expressed in higher education or in vocational courses. The differences between males' and females' preferences were slight. Males opted for basic education (46 percent) more frequently than females (39 percent). Conversely, females chose avocational courses more frequently (51 percent) than males (40 percent). Males indicated a preference for vocational courses (10 percent) compared to females (6 percent). Both chose higher-education courses the least (5 percent each).

Expressed interest in taking CEDA courses varied somewhat by age and educational background. Younger (18-to-24 years) and older (45-to-64 years) deaf adults indicated they wished to take more courses than did those in the middle years (25-to-44). A smaller tendency was for those with less education to be interested in more CEDA courses than those with higher academic attainment. Overall, the interest in CEDA was high, with differences largely in the number of courses desired. In other words, those with more education were choosier, as were persons in the mid-year ages.

Supporting their expressions of interest were deaf adults' actual performance. Almost one third enrolled in one or more courses after concluding their formal education. A majority had taken the course or

courses within the last three years, so their interest appears fairly current. About 8 percent of this sample had been in CEDA each year of the last three years, a rate no doubt higher than for the population from which they were drawn.

The data from this sample also indicate an increasing participation in CEDA over the last 10 years. More respondents had taken courses in the last 3 years than in the preceding 7 years.

About 4 in 10 of the 32 percent who had participated in CEDA received financial support to do so from their state VR agency. Approximately 3 in 10 paid their own way. The remainder was admitted without charge or had another source of support.

Neither the deaf leaders nor the state education administrators contradicted the deaf adults' expressed desire for CEDA. Lack of need or interest in CEDA accounted for 22.3 percent of the barriers the leaders perceived and 10.4 percent the administrators listed. University ACE directors only indirectly charged deaf adults with any lack of interest by noting that seldom, if ever, had deaf adults requested classes for themselves.

From these various surveys, the high potential for participation by deaf adults in CEDA programs emerges consistently. Deaf adults' enthusiasm is not, of course, unqualified, but it is generally widespread among those questioned. To the extent that the CEDA-1 sample is representative and to the extent that the deaf leaders know their constituents, CEDA programs should find a large potential audience. Tapping the potential, however, will require careful planning.

Clearly, the prevocationally deaf adults want vocational and basic education more than avocational or higher education. Leaders and adults themselves agree on basic education as a primary need. The experience of state education departments confirms this choice (see Table 19). The better-educated deaf adults sampled in CEDA-1 rate avocational courses ahead of vocational, but economic factors are likely to influence these choices. It is apparent, in any event, that deaf adults have many ideas about CEDA, and they should be consulted in planning.

Preference for Type of Course and Course Aids. The prevocationally deaf respondents divided into almost equal thirds in their preferences for classes with only deaf students, with hearing students (using interpreters and notetakers) or either. In fact, a plurality (35.3 percent) indicated no difference in class composition.

The prevocationally deaf adults lacked experience with educational films and television. For that reason, their heavy preference for CEDA via regular classes is difficult to interpret. Perhaps their votes would have been different had they had more experience with these media. The deaf leaders also had little experience with film and television in CEDA. Of the small number who had, the ratings were favorable.

The future of these media in CEDA remains one of relatively untapped promise.

Considering the question of classes exclusively for deaf adults versus classes merging deaf and normal-hearing adults, the leaders tended to prefer both, largely on the reasonable ground that breadth of course availability was the more important factor. The leaders who had CEDA experience preferred both options significantly more often than did those who were inexperienced. A cogent inference is that initial fears of mixed classes do not persist in the face of experience. A large minority of the totally deaf leaders (31.3 percent) did state a preference for classes exclusively for deaf students: 22 percent of the experienced and 40 percent of the inexperienced leaders. Some classes only for deaf adults are desired by 3 out of 4 deaf leaders.

Many reasons abound for having classes made up entirely of deaf adults. First of all, such classes would be more likely to have a teacher who signed rather than depending upon an interpreter. Thus, the pace of the class would be adjusted to the deaf students, not vice versa. With only other deaf colleagues, the students would be less likely to suffer by comparison, since their academic preparations would be more similar than if normal-hearing students were admitted. Socially, the classes would be more attractive; deaf people usually welcome opportunities to congregate, because telephone contact is limited or nonexistent. To stay in touch with one's friends generally means writing or face-to-face meetings. Another point in favor of deaf-only classes is in selection of content. Few persons in the general population might care for a course on TTY use and maintenance, something important to deaf persons. Similarly, adult speechreading courses aim specifically at hearing impaired, not deaf, persons.

Reasons favoring integration of deaf students into ACE programs also have appeal. The most convincing argument is availability. Economically, deaf persons may be cut off from courses they would like, because they cannot muster sufficient numbers. By joining established classes they overcome that barrier, provided, of course, adequate provisions for communication have been made. Some leaders argue that integrated classes often can afford instruction superior to that which deaf-only classes could afford. Deaf adults sometimes express satisfaction with, what is for them, the new experience of studying with normal-hearing classmates, expecially if their years in a residential school for deaf children were in some way unpleasant.

The Methodologies for CEDA

Any discussion of methodologies for CEDA divides into the by-now-familiar dichotomy, classes exclusively for deaf students versus classes for normal-hearing students which accept deaf enrollees. The problems and benefits associated with each differ markedly, and so warrant separate discussion.

Deaf-Only versus Mixed Classes. Most of the deaf adults who have participated in CEDA in the past decade did so in mixed classes of deaf and normal-hearing students. Only 1 in 4 had attended classes only for deaf adults. The absence of information about deaf students among university ACE administrators supports the infrequency of deaf-only classes. The state education departments also reported a minority of its CEDA courses were for deaf adults only. Of 229 classes sponsored by the states, 84 (36.7 percent) accepted only deaf students and 145 (63.3 percent) mixed deaf and normal-hearing students.

The classes designed for deaf students were most frequently situated in schools for deaf students, an arrangement apt to disappoint many deaf adults, who associate a return to their former school with childish pursuits. The next in order of occurrence were proprietary and trade schools. Combining credit and non-credit classes moves colleges and universities ahead of proprietary and trade schools in number of deaf-only classes reported, but when considered as a proportion of all CEDA classes, deaf-only courses in colleges and universities fall below all other groups (see Table 18): 16 percent compared to 93 percent for schools for deaf students, 57 percent for trade schools, 70 percent for public schools, and 86 percent for the remaining organizations.

The preponderance favoring mixed classes may or may not satisfy deaf adults' desires. Our evidence suggests that it does generally. In a given locale or with respect to a particular course, on the other hand, it may not. The fact remains that most deaf adults have, and for the immediate future will have to continue, to partake of CEDA via classes designed for normal-hearing students.

Number of Classes Available. The data from the state education departments expose the slender commitment to CEDA. Only 13 states report any programs. Altogether these classes enroll only 1,008 deaf adults. Assuming no overlap in registration, this figure represents less than 1 percent of the prevocationally deaf adult population. Granted other programs may be operating about which the state education department is unaware. But even doubling the enrollment reported would mean only 1 in 100 deaf adults under 65 years of age were in CEDA classes.

Obviously, ACE administrators at all levels, from local public schools through universities, have done little for deaf adults. The survey of universities confirms the sad picture of neglect. The single bright spot is the discernible trend toward more states becoming involved in CEDA (see Figure 1). Once involved, efforts must be directed toward increasing the amount of CEDA provided in a state.

Personnel. To have classes limited to deaf students implies, but does not necessarily require, a teacher skilled in manual communication. Such an instructor will also be likely to have an understanding of deafness in relation to education.

An alternative to the instructor who can sign is the interpreter.

Over the years, interpreters have proved to be a successful means of bringing deaf persons into regular classes. Interpreters, it is true, should be paid, and so they add to the cost of instruction. The added cost will be small, if a number of deaf persons attend the same class. Costs aside, interpreters create a problem, because they are in short supply. All of the samples queried list a shortage of interpreters as one of the major barriers to CEDA. Inevitably, this situation will worsen, at least temporarily, as interest in CEDA grows. Efforts are underway to prepare more interpreters, but present funding does not appear adequate to meet the anticipated demand for them.

Further alternatives in the classroom to instructors who can sign or interpreters are variations on transcription of the spoken portion of the lecture and discussion. Some deaf students use notetakers; others record the class proceedings for later manual interpretation or writen transcription by someone who can hear. These measures hardly advance the deaf student much beyond reading books on his own. Participation in class is minimal, if at all. Notetakers vary in accuracy and completeness of recording. Transcription from tape recordings is difficult and time-consuming.

The role of counselors in CEDA has been grossly neglected. Only the ACE administrators seem to recognize the contribution that counselors can make. They, too, are in short supply. A well-rounded plan for CEDA must include this important service, nonetheless.

Other Delivery Systems. Television and films potentially offer attractive alternatives or supplements to classroom instruction in CEDA. As the data make clear, insufficient resources have been devoted to these media. Research into their development, production, and use is in order. The economic benefits would justify a large initial investment in these means of reaching the widely scattered deaf population.

Instructional Materials. The supply of instructional materials suitable for use in CEDA has never been substantial. Indeed, aside from Captioned Films for the Deaf, no organized effort has attempted to provide CEDA with educational materials. However, even these Captioned Film materials are of limited use in CEDA. Television broadcast of the films is strictly prohibited, thereby blocking their use in any continuing education programs conducted via television. Classroom use of the films is limited by the subject matter and by the styles of presentation, which for the educational films are geared primarily to school age audiences. And, except for the "Profiles in Courage" series, the educational films are produced independently of any predefined course criteria and therefore do not lend themselves to extended sequential learning approaches. The remaining films, the strictly entertainment films, constitute the overwhelming majority of the titles which are appropriate for adult viewing.

The Bureau of Education for the Handicapped's reorganized network of materials centers could fill the gaping hole in CEDA by undertaking an aggressive production campaign. The need is apparent.

Finances

Deaf adults have shown a willingness to purchase educational services, but their resources are thin. Vocational rehabilitation agencies have financed a large amount of CEDA, with voluntary organizations contributing considerably. State education departments appear to have neglected CEDA in the main. The new federal legislation funding the Center for Continuing Education has not yet shown a great effect in this regard. University administrators manifest interest in CEDA, but they have no means to start such programs, unless they can be assured of financial support. Certainly, insufficient funding is perceived by all those questioned as a present barrier to CEDA.

Projecting the Need and Demand for CEDA

In projecting the need and demand for CEDA, certain assumptions have been made. First, we contend that all prevocationally deaf persons need CEDA, regardless of their level of educational attainment. If they hold doctorates, they still need CEDA to enable them to keep pace with current events, whether vocationally related or essential to participation in community affairs. For those less well educated, CEDA becomes more a matter of economic survival. The changing labor market already deprives some deaf workers of their jobs. More occupations traditionally open to deaf employees are disappearing. CEDA should fill a role in providing basic education propaedeutic to further vocational training, as well as providing the vocational programs.

Prevocationally deaf adults, no matter what their educational attainment, cannot presently depend upon radio and television for news and culture. These ubiquitous purveyors of rapid information are largely denied to those who cannot hear. CEDA can, and should, provide the missing communications link for all educational levels of deaf adults.

So much for need. What about demand? To what extent will deaf adults be motivated to participate in CEDA programs? Responding to those questions presupposes a knowledge of programs and facilities to come. The above data show that optimal programming can attract 3 out of 4 deaf adults. Offerings over the last decade have cumulatively attracted up to 3 out of 10 of the better-educated deaf adults. However, about half of that number enrolled in CEDA within the last 3 years, implying a positively accelerated growth curve. The evidence suggests that prevocationally deaf adults will respond vigorously to attractive, well-planned programs.

What is the likelihood for a corresponding interest from the service providers? Assuming funds are available, the answer is good. The survey of ACE administrators and state education departments evinced many expressions of enthusiasm for CEDA. In making the projections, then, we see the limitations largely in terms of funding. Personnel and material shortage can be overcome with money. The principal variable in the projections, then, becomes one of gauging legislative and administrative responses to the needs of deaf adults.

Since public funding presently supports little CEDA, we anticipate an initially slow growth. The allocation over the decade should increase to a final rate approximating funding from public sources for one third the estimated need. The balance would be funded from other sources; e.g., voluntary organizations of and for deaf adults. These groups already contribute substantially to CEDA. Also, deaf adults who can afford to pay for their own education apparently do so. To reach those less affluent, however, will require outside support.

The Deaf Adult Population: 1975-1985. The deaf adult population, aged 18-to-64 years, is projected for each year from 1975 to 1985, in Table 33. The table shows the estimated sizes of both the early and late deafened groups. While our report focuses solely on the prevocationally deaf population, we recognize an obligation to continually remind our readers and ourselves of the larger number of adults who lost their hearing at or after 19 years of age.

Based on the present levels of support, we anticipate a slow increase of 2 percent participation in CEDA per year by prevocationally deaf persosn through 1979. This increase should jump to 4 percent from 1980 through 1982, returning to 2 percent until 1984, after which we predict an asymptote will be reached approximating 24 percent of the prevocationally deaf adults annually being involved in CEDA.

The growth rate in CEDA participation by prevocationally deaf persons as contrasted by the annual increment, is initially steep: doubling between 1975 and 1976, increasing by 12 times over the 10-year span. How are these rates justified?

Early in CEDA's growth we can anticipate sizable gains from small encouragement. ACE administrators appear genuinely eager to establish programs; deaf adults seem greatly motivated. At the same time, working against growth will be shortages in personnel, especially interpreters. Informing the deaf community will require intensive publicity. That is why a deceleration in rate is seen. Within 5 years, if funds have been available, these shortages will be alleviated, and growth will become a matter of reaching the deaf adults with the programs they apparently desire.

We regard the final estimate of 24 percent participation as conservative. Understanding the figure requires a definition of participation. The term means enrollment in one or more courses during a given year. A course is any organized learning experience directed toward systematic attainment of a specified educational goal. Defined in this way, participation by 24 percent of deaf adults appears reasonable.

The reader needs to recall two points before reflecting further on the projections. The level of participation depends, in part, upon the response of ACE programs, which in turn will depend upon provision of adequate funding. Secondly, these preceding figures refer to the prevocationally deaf population, not to all deaf persons. Many of the

CEDA efforts will also benefit the much larger group of deaf persons whose hearing loss occurred at and after 19 years of age. Allocation of costs should be made with the broader view of benefits to all deaf persons. For example, we estimate that 78,850 deaf adults will partake of CEDA in 1975. Of this number, 4,329 will be prevocationally deaf and the remainder deafened in adulthood. The discrepancy is due both to a lower estimated rate of participation in CEDA by prevocationally deaf persons (2 versus 10 percent) and to a smaller prevocationally deaf population (216,475 versus 745,205). Because of the anticipated change in relative rate of participation, prevocationally deaf adults should make up nearly 34 percent of the projected number of deaf adults in CEDA by 1983.

Note that in making the projections for the late-deafened adults we have used a slower rate of increase, beginning at 10 percent, roughly the national average. Obviously, much could, and should, be done to increase participation by these people. However, their situation remains the subject for another study. That study, we hope, will be done, since its results will clearly be relevant to the needs of prevocationally deaf persons, just as this study bears relevance to all deaf persons.

Table 33

Present and Projected Deaf Population Aged 18 to 64 Years and Number Participating in CEDA, by Age at Onset[a]: 1975-1985

Year	Deaf Adults 18-64 Years		Prevocationally Deaf Adults 18-64 Years		Late-Deafened Adults 18-64 Years	
	Total	Number in CEDA	Total	Number in CEDA[b]	Total	Number in CEDA[c]
1975	961,680	78,850	216,475	4,329	745,205	74,521
1976	969,000	83,694	220,100	8,804	748,900	74,890
1977	976,840	84,248	223,940	8,958	752,900	75,290
1978	985,240	97,011	227,309	13,639	757,931	83,372
1979	994,180	102,445	230,468	18,437	763,712	84,008
1980	1,003,670	120,440	233,385	28,006	770,285	92,434
1981	1,013,560	131,099	236,792	37,887	776,768	93,212
1982	1,023,660	149,827	239,310	47,862	784,350	101,965
1983	1,033,920	156,121	241,241	53,073	792,679	103,048
1984	1,044,250	170,467	242,716	58,252	801,534	112,215
1985	1,054,580	171,991	243,494	58,439	811,086	113,552

[a]Prevocationally deaf adults become deaf before 19 years of age; late-deafened adults become deaf at or after 19 years of age.

[b]Based upon the following rates of participation per year: 2,4,4,6, 8,12,16,20,22,24,24 percent.

[c]Based upon the following rates of participation per year: 10,10,10, 11,11,12,12,13,13,14,14 percent.

Chapter VII

RECOMMENDATIONS

The major purpose of this project is to make recommendations to the Bureau of Education for the Handicapped about ways and means of improving Continuing Education for Deaf Adults. In preparing the recommendations, we have depended upon the data gathered in the surveys reported in the preceding chapters, the advice of experts on ACE, CEDA and deafness, and the expertise of the Deafness Research & Training Center staff.

Each recommendation consists of (a) a brief statement of the suggested action, (b) a short summary of the current project's findings which are related to the recommendation, (c) suggestions for implementation and (d) cost estimates. The recommendations are grouped into four areas: Delivery Systems, Subject Areas, Personnel and Instructional Methods and Materials.

Taken together, the recommendations suggest a comprehensive plan for CEDA. Because the recommendations are more likely to be considered and implemented separately than as a unit, some repetition in the proposed actions occurs. The presentation of the recommendations is not hierarchical. Although not all of them are equally critical temporally or economically, all merit full consideration in time.

I. Delivery Systems

The projected 24 percent involvement of prevocationally deaf adults in CEDA will not occur without efforts by the general community. In a sense, all recommendations below are designed to either bring deaf adults into programs or to keep them interested once enrolled. The suggestions in this section aim to strengthen the delivery systems for CEDA.

Regardless of whether programs are designed specifically for deaf adults or modified to accommodate them, the number of programs must be increased and their distribution improved. The following recommendations are intended to suggest means by which CEDA now being undertaken can be strengthened and supplemented. Clearly, greater involvement of additional resources---both geographically and educationally diverse---is called for, in order to meet the needs and desires of deaf adults. The recommendations, therefore, presuppose continuance of ongoing programs.

Recommendation 1.

That regional postsecondary education facilities for deaf students under Section 625 of the Elementary and Secondary Education Act be mandated to provide CEDA in addition to their programs for deaf adolescents.

Rationale. The Triangle Schools have already demonstrated their ability to mount and maintain effective educational programs for deaf adolescents. The model these postsecondary programs use combines the best features of both the designed-for-deaf students and modified-for-deaf-students approaches. Sufficient numbers of deaf students are brought together to make economically feasible counseling and interpreting personnel exclusively for them. Some basic courses (e.g., English) are set aside for deaf students. Most trade-specific courses merge deaf and normal-hearing students. Interpreters bridge the communication gap in the latter courses, though instructors become familiar with deaf students' specialized problems through staff orientation and individual experience.

The expertise gained by these schools can be used to implement CEDA programs. As regional postsecondary facilities are established, they also should be mandated to conduct CEDA programs and to encourage their development by other facilities.

Implementation. A reading of Section 625 ("Regional Programs for Deaf Students") of the Elementary Secondary Education Act does not clarify the necessity for Congressional action. Absent that action, an administrative decision within the Office of Education should suffice, along with appropriate budgetary adjustments, to implement this recommendation.

Estimated Cost. A first-year, start-up budget of $300,000 is recommended. In subsequent years, this amount should increase as

rapidly as new regional facilities are established. We project an increase of $150,000 per year through the fifth year projected.

Recommendation 2.

That the programs of the Center for Continuing Education at Gallaudet College be accelerated.

Rationale. Though the program is too new to be adequately judged as to its effectiveness, the Gallaudet project represents an encouraging show of federal interest in CEDA. The low level of funding forces Gallaudet to maintain a local flavor to its efforts. Only a tiny fraction of the deaf population can be reached under its present budget.

Implementation. A substantial increase in the allocation for the Center for Continuing Education should be appropriated.

Estimated Cost. The Center for Continuing Education appears capable of managing a large increment in its funding. A budget of $500,000 would not be unreasonable next year, with additional increases in subsequent years to a funding level of $7-800,000 per annum.

Recommendation 3.

That additional institutions of higher education be induced through incentive grants to offer CEDA programs.

Rationale. To provide the geographical extent and academic breadth of coverage CEDA deserves, additional universities and colleges must become involved. The survey indicates considerable expressed interest, but a grave lack of information about deaf adults and their educational needs. Funding is one major obstacle; personnel another. This recommendation deals with funding to demonstrate the feasibility of CEDA to the institution and encouraging deaf adults to attend. Personnel is dealt with elsewhere.

Implementation. During a five-year period incentive grants are proposed. These sums would be awarded on a competitive basis amongst interested colleges and universities. The recipients would be expected to maintain programs after incentive awards cease. Where the deaf community evinces sufficient desire, local resources would maintain the programs.

Estimated Cost. An appropriate budget for the United States would be as follows:

Year	Amount
1	1.5 million
2	2.0 million
3	4.0 million
4	5.0 million
5	5.0 million

Recommendation 4.

That a program be established to inform and encourage educational institutions to provide CEDA in their communities.

Rationale. The survey of ACE administrators in universities demonstrates the need for arousing their interest and then providing them with information about deaf adults in their community. At the same time, deaf leaders expressed concern about their constituents' motivation for CEDA. Efforts to acquaint deaf consumers with the potential benefits of CEDA (e.g., Project DAWN) have proven successful, though the efforts have not been sufficiently widespread. Clearly, such programs need to be extended.

Implementation. Participation by deaf persons increases the probability of CEDA's effectiveness. Therefore, the task of encouraging ACE administrators to make more programs available to deaf adults and, at the same time, encouraging deaf adults to partake of the programs should be undertaken by the principal organization of deaf people, the National Association of the Deaf. The NAD has chapters in nearly all states. It is recognized as the foremost representative of early deafened people and, as such, should earn as good a reception from ACE administrators as it already has from deaf consumers.

The NAD should not confine its motivational program to universities and colleges. Public schools should be encouraged to provide CEDA, along with churches, service clubs, labor unions, etc. As noted earlier, these latter organizations provide a large share of ACE. They could provide much more CEDA.

Estimated Cost. To undertake this program, we calculate that a five-year budget of $200,000 per year would be adequate for the NAD, because of its well-developed organization and extensive contacts in both the deaf and general communities. More funds would be required for a lesser endowed organization.

Recommendation 5. That an intensive, systematic research program be initiated to determine the most efficient means of using television and film in CEDA.

Rationale. In order to reach the thinly scattered deaf adults, telecommunications offers attractive, largely unused channels. The survey data illustrate that few deaf adults have been exposed to the instructional possibilities of television in its many forms---broadcast, cable, cassette---or film. The reasons for this neglect are not clear. One possibility is the lack of information on the optimal use of sign language and/or captions to supplement the sound tracks. Hence this proposal.

Though millions of dollars have been spent on captioning activities each year during the past several years, the research data is extremely limited regarding the effectiveness of the configurations and rates of display of these supplements. For example, the three basic captioning

projects supported by the Bureau of Education for the Handicapped (Captioned Films, the WGBH "Captioned ABC News," and the PBS "Captioning for the Deaf" project) have very different configurations and rates of display for their captions. These different approaches should be systematically compared.

Related problems of comprehension and vocabulary levels of captions and sign language interpretation have not been adequately researched. Improved supplements would markedly increase the effectiveness of modified course materials for reaching deaf students. However, without serious, sustained research, we cannot expect to develop media for use in CEDA.

Implementation. Serious, professional research is needed immediately in several areas. The priorities for initating this research should be set by an advisory panel composed of experts from fields including visual perception, linguistics, deaf education, and film and television production.

The work would include comparisons of deaf viewers' comprehension of existing supplements by shape, size and rate. As a result guidelines for future production, possibly including the development of entirely new formats and production techniques, would be published. All the results would be disseminated regularly through national organizations of film and television producers and through the agencies of BEH, especially the Captioned Films Branch and the Learning Resources Branch of the Media Services Division.

Estimated Costs. A three-year research effort is foreseen at an initial cost of $450,000, to underwrite equipment purchases, and an annual rate of $250,000 per year for the remaining two years. Additional support, if any, would depend upon the definitiveness of the results from the three years' efforts.

Recommendation 6.

That distribution of the supplemented ACE course materials be made through the existing agencies contracting with the Captioned Films Branch of BEH and through the Learning Resources Branch (S_2 and S_4 and NCEMMH), as well as through established libraries for continuing education materials, both commercial and nonprofit.

Rationale. The widest distribution of supplemented course materials is feasible only by utilizing as many as possible of the major distribution and syndication facilities for continuing education materials and the existing network (Captioned Films, S_2, S_4, NCEMMH) for distributing materials directly for use by deaf audiences. One of the major users of visually supplemented course materials may be the ACE instructors who teach primarily hearing students but encounter occasional deaf students. The Network will reach other markets easily.

Implementation. The initial period of exploring the new distribution

arrangements would be comparatively modest, with an emphasis on establishing each successive step in the entire production and distribution process starting with the identification of course need and then moving through each step to producing the visual supplements, to delivering the supplemented material to the distributor, and finally to evaluating the extent and nature of the use of the supplemented material.

Of major concern would be the effect of alternative distribution modes on the use of the materials. Though much of the distribution would be through existing distribution arrangements (Captioned Films Branch and the Learning Resources Branch), new distribution alternatives would be explored. Supplemental television materials produced by WGBH-TV (Boston) would continue to be distributed by the Public Television Library. Materials from major national libraries of film and television instructional materials would be captioned and then returned for distribution through these same libraries. (Such libraries would include the Great Plains Instructional Television Library, in Nebraska.)

The distribution of commercial materials would be explored, if possible, in the following manner. A commercially produced series of materials which constituted an attractive and appropriate CEDA course would be secured from the producer or distributor and captioned. The materials would then be returned to the producer or distributor, in return for the commitment that the producer or distributor would bear all costs for distribution and would report regularly on the extent and nature of the materials' use.

Estimated Costs. Additional costs required for distribution would be included in increased budgets for the Captioned Films Branch and/or for the Learning Resources Branch in the following amounts:

Year	Amount
1	$100,000
2	$150,000
3	$200,000
4	$300,000
5	$400,000

II. Subject Area

The surveys show that Basic and Avocational Education courses have highest priority among deaf adults. Nonetheless, courses that fall under Higher and Vocational Education should not be ignored. First of all, the minorities in taste among deaf adults should be served, and, and secondly, the deaf adults' preferences may change as their experience with CEDA broadens. The recommendations in this section, then, emphasize the need for making available to deaf adults a wide variety of courses.

Recommendation 7.

That support be given to encourage participation by small numbers of deaf adults in ACE offerings that do not attract sufficient deaf persons to be self-supporting.

Rationale. As noted above, the minorities of deaf adults in terms of their interests deserve educational programs in the less-popular categories of Vocational and Higher Education, not to mention specific courses which may not be attractive to many deaf persons in a particular locale. The principal barrier to their participation in ACE is the high cost of accommodating one or two deaf adults.

Implementation. Grants should be made to state educat[illegible] departments to cover the costs of interpreters and/or notetakers for deaf persons wishing to take ACE courses. Administered through the state or local education agencies, such a program of grants would greatly encourage participation by deaf adults in ACE. At the same time, the deaf person's opportunities for ACE would be equalized, since other costs---tuition, books, fees---would be the same as for all students.

Estimated Cost. Assuming an interpreter fee of $10 per hour (relatively high) for a 12-week course meeting two hours once each week (relatively modest), each course would cost $240. Ignoring the possibility of two or more deaf persons attending the same lectures, and assuming the funds will only be used by one fourth of prevocationally deaf adults participating in CEDA each year for the first five years (see Table 33), then we arrive at the following cost estimates:

Year	Amount
1	$250,000
2	$500,000
3	$550,000
4	$950,000
5	$1,100,000

III. Personnel

Among the major barriers to CEDA cited by survey respondents is the lack of qualified personnel. Few educators of deaf students have any preparation for, or experience with, CEDA. Interpreters are scarce. Counselors of deaf adults are equally in short supply. The following recommendations largely foresee programs designed to rapidly overcome these personnel shortages. Short-term solutions are suggested over long-term alternatives. Economic factors as well as the immediacy of the needs have been the prime considerations in framing these recommendations.

Recommendation 8. That short-term programs be established to prepare ACE personnel for CEDA.

Rationale. The deaf student presents an educational problem extending beyond the inability to hear. Academic backgrounds often differ markedly from students ACE administrators and instructors customarily meet.

Early loss of hearing affects language development and may be associated with personality deviances. The ACE instructor who teaches large numbers of deaf adults over time should have special preparation to improve his handling of classes mixing deaf and hearing adults or those exclusively for deaf students. Counselors, too, need special training to enable them to become effective with deaf students (see Recommendation 10).

Implementation. Gallaudet College and the Regional Postsecondary Schools have experience in conducting programs of the type recommended. They can probably conduct a large share of the preparation. However, additional facilities will be needed in various locations to supplement their efforts. The provision of grants for such programs will make possible a sufficient number to meet the needs in the field.

Estimated Cost. A first-year sum of $100,000 should be followed in subsequent years by grants aggregating $250,000 per annum over a total of five years.

Recommendation 9. That funds be allocated to speed the training of manual interpreters.

Rationale. The interpreter is the talisman which opens ACE to deaf adults. Not all prevocationally deaf adults can understand sign language, but the majority can. At present, however, the Registry of Interpreters for the Deaf lists fewer than 400 certified interpreters in the United States, and at least half that number are unavailable routinely, because they have other full-time committments. Clearly, any economical increase in CEDA requires an increase in interpreters. The findings of the present project are unequivocal on this point.

Implementation. The National Interpreter Training Consortium (NITC) offers an established vehicle for purposes of this recommendation. NITC presently is engaged in a nationwide program of recruiting and training interpreters. Through added funding, NITC can meet the needs expressed here.

Estimated Cost. To supply an additional 600 interpreters in the next four years would cost approximately $900,000, or $225,000 per annum. The 600 interpreters would be selected from all 50 states, in accordance with each state's needs. The cost of setting up programs outside the ongoing NITC would be at least double the estimated sum and probably could not assure coverage of all states.

Recommendation 10.
That short courses on deafness be offered to counselors who will be employed in CEDA.

Rationale. Educational counseling is an important, often neglected aspect of CEDA. Few counselors are prepared to assist in such programs. Because of the urgent need, brief orientation to deafness is preferred

over degree-preparation. The differences in counseling deaf rather than hearing students can be readily absorbed by persons already qualified to counsel.

Implementation. Grants should be made available to facilities capable of providing brief training for counselors. Such training will include the use of interpreters in counseling situations in which the counselor cannot directly communicate with the deaf adult.

Estimated Cost. A five-year program at an annual cost of $175,000 is foreseen.

Recommendation 11.

That funds be allocated to evaluate personnel training and to research alternative approaches to the use and preparation of CEDA personnel.

Rationale. Any large-scale training program should include evaluation to ascertain its performance. Attention also should be given to the possibilities for better techniques and improved programs of preparation. Furthermore, the distribution of trained personnel, their employment or lack of it, and related issues require study to optimize the use of training funds.

Implementation. A research program should be funded and awarded to a qualified research facility.

Estimated Cost. A minimum budget of $150,000 per year over five years should be adequate to meet the objectives noted above.

IV. Instructional Methods and Materials

The lack of appropriate materials for CEDA is a barrier perceived by ACE experts but not deaf consumers. Nonetheless, the need for instructional materials designed or modified for deaf adults is manifest. Instructional methods also deserve consideration. The recommendations below deal with critical areas, again, in terms of near-term rather than long-term solutions.

Recommendation 12.

That an exhaustive review of all available media software for ACE courses be made to determine which have potential for being visually supplemented for CEDA.

Rationale. A considerable amount of ACE course material is available to adult hearing students which is unavailable to adult deaf students because of dependence on auditory presentation or on inappropriate language. A review of these materials before supplementation would be useful.

Implementation. A review of materials could be conducted by the

Division of Media Services (S_2 and Captioned Films for the Deaf) as an expansion of current responsibilities and through contracts to several outside agencies, each chosen for a particular aspect of the review. Lists of existing ACE course materials would be prepared in cooperation with national professional associations concerned with continuing education and with the Public Broadcasting Service, especially the Task Force on Adult Education which recently completed its report to the CPB Advisory Council of National Organizations. Concurrently, priorities would be established for instructional areas important to adult deaf students. The list of existing ACE materials and the priorities for instruction would then be compared in order to identify materials for modification. This final comparison and review would be the direct responsibility of BEH's Division of Media Services (S_2 and CFD).

Estimated Cost. These activities can be supported on a continuing basis within the increased operating budgets of agencies within the Division of Media Services (S_2 and CFD), though full support of an initial, one-year stage of identification and review may require an additional one-time expenditure of approximately $100,000.

Recommendation 13.

That a review be made of the procedures used by Captioned Films for the Deaf in purchasing or leasing film and television materials for deaf adults, especially as they regard copyrights and releases for materials which would be suitable for broadcast over television.

Rationale. The extensive catalogue of captioned materials provided through CFD are for the private use of groups of deaf people or schools for deaf students. By limiting the use of these materials to these restricted audiences and settings, CFD is able to secure distribution releases from producers at very modest costs. These charges are a very small fraction of the usual charges for the public television releases. Thus, CFD is able to provide an extensive catalogue of titles at a very nominal cost to BEH and at no cost to the users.

However, many ACE courses rely upon televised instruction and therefore require materials which have full television releases. For that reason, materials in the current CFD catalogue cannot be used. Unless the CFD guidelines are changed to permit broader television releases for selected future materials, it will not be possible to provide captioned ACE materials or televised courses through existing CFD arrangements.

Implementation. This recommendation only involves an internal review of policy, conducted with an outside advisory committee composed of film and television production experts, experts in deafness, experts in continuing education, and deaf consumers.

Estimated Cost. No additional cost above present agency budget is anticipated.

Recommendation 14.

That selected existing ACE course materials (especially film and videotape materials) be visually supplemented for adult deaf students.

Rationale. There is a considerable amount of valuable ACE instructional material available nationally in the form of courses as well as course supplements. However, these materials are inaccessible to adult deaf students because instruction depends on the auditory channel. Suitable visual modification of these ACE materials would be especially valuable in classes which include both deaf and hearing students.

Implementation. Establishing a program to visually supplement and then to distribute ACE materials to deaf students would require the initiation of five distinct activity areas: visual-display research, selection of course materials, and distribution. Each of these activity areas would be developed from current or past activity areas which have already been supported by BEH through the Division of Media Services, particularly through the Captioned Films Branch and the Learning Resources Branch (NCEMMH and S_2). By contracting through existing resource facilities in the Division of Media Services, important economies can be realized.

Cooperation with other government agencies, such as Bureau of Vocational Education in the Office of Education and the Rehabilitation Services Administration, is also strongly encouraged.

A comprehensive, sustained capability for research on visual displays would be initiated immediately to determine optimal visual-display supplements (size, rate, placement, etc.) and to measure viewer comprehension of the alternative formats (see Recommendation 5). Suitable ACE course materials would be selected through the Division of Media Service (S_2 or CFD) in close cooperation with deaf consumers and experts in continuing education and in the education of deaf people. The preparation of scripts for the visual supplements would be the responsibility of experts in deaf education, subcontracted through the Division of Media Services (S_2 and/or CFD). The production of the actual supplemented materials would be accomplished by professional film producers, laboratories and libraries, and subcontracted through S_2 and/or through CFD. We recommend that in addition to WGBH-TV (Boston) one or more major PBS stations with visual research facilities be funded to caption continuing education materials. Distribution of the completed materials would be made through the existing agencies contracted through CFD and the Learning Resources Branch of the Division of Media Services, as well as through established libraries for continuing education materials, both commercial and nonprofit.

Estimated Cost. The cost of this recommendation is greatly reduced by the use of the existing media network established by BEH. We anticipate the following annual expenditures:

Year	Amount
1	$750,000
2	$1,000,000
3	$1,250,000
4	$1,500,000
5	$1,500,000

Recommendation 15.

That a research and development project be funded which would create and evaluate a fully mediated course for deaf adults.

Rationale. Film, television and other audiovisual technologies promise to be valuable in reaching adult deaf students. However, surprisingly little original material is available for their use either for classroom or non-classroom courses. Also, thorough evaluation of any materials which have been used has been virtually nonexistent. The development of methods to produce and to evaluate fully mediated courses would permit accurate assessments of their costs and effectiveness, as well as of course supplements.

Implementation. As with the modification of existing materials, the production and evaluation of entirely new materials requires commitments to several interdependent activity areas. These activities should be contracted through S_2 of the media network. Cooperation with other governmental agencies to assist in programming should also be sought.

The actual production of the materials would include three basic stages: The statement of the objectives, the production of the materials, and the evaluation of the effectiveness of the materials. These activities would be the responsibility of a professional production company in cooperation with curriculum development experts and with experts in CEDA. S_2 would supervise these activities and would require extensive reporting at each stage of development and research. The evaluation of the materials would be especially important and would require a full year of field testing.

Estimated Costs. The research, development and evaluation of the course would require approximately $600,000 over a three-year period. The first year would be devoted to the development of pilot materials ($300,000); the second year to extensive field testing ($200,000), and the third year to revision and further testing of the materials ($100,000).

Summary of Estimated Costs

Table 34 presents the estimate of cost for the four groups of recommendations over five years. The totals in the table are based on the assumption that all recommendations will be funded at the level requested.

Table 34

Summary of Estimated Cost for Instituting Recommendations for CEDA Over 5 Years

Recommendation Category	Cost Per Year (in Thousands of Dollars)[a] Total	1	2	3	4	5
All Categories	40,575	5,100	6,250	8,650	10,200	10,375
Delivery Systems	26,900	3,050	3,750	5,950	6,950	7,200
Subject Areas	3,350	250	500	550	950	1,100
Personnel	3,625	650	800	800	800	575
Institutional Methods & Materials	6,700	1,150	1,200	1,350	1,500	1,500

[a]Where a range of costs has been given, the lower figure is shown here.

The cost of the recommendations in total over the five years is $40.5 million. How this sum will be judged by administrators or legislators is difficult to anticipate. The reaction that is desired, however, can be exemplified by the reaction of The New York Times to proposed cuts in allocations for continuing education. In an editorial, the editors state:

> No social history of New York is complete without tales of the way adult and night school classes helped millions of immigrants to unravel the mysteries of American life and come to terms with the English language. Since 1847, the city's school authorities, through their continuing education services, have aided generation upon generation of out-of-school youths and citizens of all ages. In the past academic year, 251,000 persons were enrolled in classes ranging from English for foreigners to a wide variety of educational and vocational skills.
> This invaluable program is now threatened with a 50 per cent budget cut that seems to have been imposed with as little concern for fiscal realities as for social values...To sacrifice educational services of such unquestioned benefits is as fiscally irresponsible as to overspend on items whose reduction would result in real rather than such illusory savings.
>
> The New York Times, June 22, 1975

The grand experience of immigrants could no less apply to deaf

adults. They should be granted the same "unquestioned benefits" of continuing education as newcomers to this country. Deaf adults, as much as other adults, need the access to ACE that these recommendations would provide.

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APPENDIX A

Questionnaires, and Form Letters

Used in Surveys

CEDA-1

Questionnaire Sent to Deaf Adults

SURVEY OF CONTINUING EDUCATION FOR DEAF ADULTS

Affix Label Here

NOTICE—All information which would permit identification of the individual will be eliminated after data processing has been completed. Only aggregate data will be published.

Dear Friend:

You have been chosen to be interviewed as part of the Assessment of Needs for Continuing Education of the Deaf. We need your help to make this study a success.

The purposes of this study are (1) to assess the needs that deaf persons have for education after secondary school, (2) to explore ways of meeting these needs, and (3) to develop a set of recommendations which will assist the Federal Government in planning future support for the continuing education of deaf adults.

We are making this national survey to get the kind of information that the government needs. A national survey like this is very expensive, so we cannot interview all deaf people. We have used a computer to select a sample to represent all of the deaf people in this country. You represent about 200 other deaf persons like yourself. That is why your answers are so important.

Of course, no information will be released that will identify any individual respondent; i.e., all information released will be on an aggregate basis. Further you will note that you are requested to give your name on the questionnaire. This is for the sole purpose of providing information for follow-up letters to those that are late in responding. Once you have responded, your name will be destroyed and there will be absolutely no way to associate any of your responses with your name.

Please complete the enclosed questionnaire and return it in the enclosed postage-paid, pre-addressed envelope as soon as possible.

Sincerely,

Jerome D. Schein

DEAFNESS RESEARCH & TRAINING CENTER

Jerome D. Schein, Ph.D.
Director
Deafness Research & Training Center
New York University

Name: _____

Address: _____
Street and Number City State Zip Code

Sex: ☐ Male ☐ Female Age: _____

Please tell how well you hear by marking *either* Yes or No for every question.

Answer the way you hear *without a hearing aid*.

1a. Can you hear loud noises? ☐ Yes ☐ No

1b. Can you usually tell one kind of a noise from another? ☐ Yes ☐ No

1c. Can you usually tell the sound of speech from other sounds and noises? ☐ Yes ☐ No

1d. Can you usually hear and understand a person if that person speaks loudly into your better ear? ☐ Yes ☐ No

1e. Can you usually hear and understand what a person says without seeing his face if that person shouts to you from across a quiet room? ☐ Yes ☐ No

1f. Can you usually hear and understand what a person says without seeing his face if that person talks in a normal voice to you from across a quiet room? ☐ Yes ☐ No

1g. Can you usually hear and understand what a person says without seeing his face if that person whispers to you from across a quiet room? ☐ Yes ☐ No

---

2. How old were you when you began to have serious trouble hearing or became deaf? _____
Age at Onset of Hearing Loss

---

3. Are you married? ☐ Yes ☐ No

If you have children, what are their ages: _____; _____; _____; _____.

4a. Are you presently employed? ☐ Yes ☐ No (Skip to Ques. 5)

4b. If "Yes," what is the name or title of your job? _____

4c. What are your normal duties? _____

---

5. What was your total family income before taxes for the past 12 months, that is, all income from you and other family members. (Check the box for the amount that fits.)

☐ Under $6,000

☐ $6,000 - $9,999

☐ $10,000 - $14,999

☐ $15,000 and over

6a. Circle the highest grade of school you completed.

Elementary: 1 2 3 4 5 6 7 8

High School: 9 10 11 12

College: 1 2 3 4 5+

6b. Have you ever attended a vocational or trade school?

☐ Yes ☐ No (Skip to Ques. 7)

6c. How many years did you attend that school? (Circle one)

1 2 3 4 5+

---

7. Which of the following types of courses would you be interested in taking if they were offered? (Check all that apply)

☐ Reading improvement
☐ Writing improvement
☐ Speech improvement
☐ Math improvement
☐ Preparation for a high school diploma
☐ College degreee program
☐ Preparation to learn a trade (specify which trade)_____
☐ Leisure time activities (crafts, hobbies, and recreation)
☐ Improving home making skills
☐ Improving family relationships
☐ Bible and Religious subjects
☐ Foreign languages (specify) _____
☐ Health education
☐ Public affairs (politics, economics, etc.)
☐ Other (specify)_____
☐ None, not interested in taking a course

---

8. Are any of the courses listed in question 7 available near you?

☐ Yes ☐ No

9a. From the time you left school or college as a full-time student, have you ever enrolled in an educational course?

☐ Yes ☐ No (Skip to Ques. 10)

9b. If "Yes," was the course sponsored by a: (Check one)

☐ Public school
☐ High school
☐ College
☐ Private trade or business school
☐ Cooperative extension service
☐ Government manpower program
☐ Union
☐ Place of employment
☐ Church
☐ Club for the deaf
☐ Library
☐ YM/YWCA or community
☐ TV station
☐ Correspondence school
☐ Other (specify) _____

9c. What was the last year in which you took a continuing or adult education course? _____ Year

9d. Who paid for that course? (Check one)

- ☐ Self
- ☐ Free
- ☐ Vocational rehabilitation
- ☐ Other (specify)_____

9e. Was there an interpreter or did the instructor sign or was any special provision made for deaf students? (Check all that apply)

- ☐ Interpreter
- ☐ Instructor signed
- ☐ Special provisions (specify)_____
- ☐ No special provision

9f. Was the course you took: (Check one)

- ☐ Only for deaf adults
- ☐ For deaf and normal-hearing adults (Skip to Ques. 9i)
- ☐ Some courses only for deaf adults and some for deaf and normal-hearing adults

9g. How would you evaluate the course for deaf adults only in which you were enrolled? (Check one)

- ☐ Never attended course for deaf adults only
- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Not very good
- ☐ Poor

9h. What are the reasons you evaluated the course that way?

_____

_____

9i. How would you evaluate the course with normal-hearing adults in which you were enrolled? (Check one)

- ☐ Never attended a course with normal-hearing adults
- ☐ Excellent
- ☐ Good
- ☐ Fair
- ☐ Not very good
- ☐ Poor

9j. What are the reasons you evaluated the course that way?

_____

_____

10. Would you rather enroll in classes for deaf adults only or in regular classes with interpreters and notetakers? (Check one)

- ☐ Deaf adults only
- ☐ Regular classes with interpreters and notetakers
- ☐ No difference

11a. Have you ever taken a course by TV?

☐ Yes ☐ No (Skip to Ques. 12a)

11b. If "Yes," what course? _____

11c. Were any special provisions made for deaf students (such as captions, interpreters, etc.)?

☐ Yes, captions
☐ Yes, interpreters
☐ Yes, other (specify) _____
☐ No

11d. How would you evaluate that course? (Check one)

☐ Excellent
☐ Good
☐ Fair
☐ Not very good
☐ Poor

11e. What are your reasons for evaluating the course that way?

_____

_____

_____

12a. Have you ever taken instructions by film?

☐ Yes ☐ No (Skip to Ques. 13)

12b. If "Yes," what course? _____

12c. Were any special provision made for deaf students (such as captions, interpreters, etc.)?

☐ Yes, captions
☐ Yes, interpreters
☐ Yes, other (specify) _____
☐ No

12d. How would you evaluate that course? (Check one)

☐ Excellent
☐ Good
☐ Fair
☐ Not very good
☐ Poor

12e. What are your reasons for evaluating the course that way?

_____

_____

_____

13. Which method of educational programming would you prefer? (Check one)

☐ Regular classes
☐ Classes on TV
☐ Correspondence study
☐ Self study
☐ No difference
☐ Other (specify) _____

14a. Have you ever been refused admission to a class because you were deaf?

☐ Yes ☐ No (Skip to Ques. 15a)

14b. If "Yes," please explain? _____

_____

_____

15a. What organizations or groups sponsor continuing education programs in your community? (Check all that apply)

☐ Public schools
☐ High schools
☐ Colleges
☐ Cooperative extension services
☐ Government manpower training programs
☐ Private trade and business schools
☐ Churches
☐ Clubs for the deaf
☐ Library
☐ YM/YWCA and community centers
☐ TV stations
☐ Other (specify) _____

_____

☐ None

15b. Do any of the above have special provisions for deaf adults?

☐ Yes ☐ No (Skip to Ques. 16)

15c. If "Yes," which ones? _____

_____

_____

16. Which of the following do you consider to be major barriers in preventing you and/or other deaf adults from attending continuing education classes? (Check all that apply)

☐ Classes for deaf adults are not available
☐ Not a sufficient variety of classes for deaf adults
☐ Fees are too high
☐ Lack of qualified teachers for deaf adults
☐ Lack of qualified interpreters
☐ Poor counseling services
☐ Home responsibilities are too great
☐ Too tired to go to school after work
☐ Reluctant to attend classes with normal-hearing adults
☐ Feeling that educational classes don't lead anywhere
☐ Other (specify) _____

_____

CEDA-2

Questionnaire Sent to Deaf Leaders

SURVEY OF CONTINUING EDUCATION FOR DEAF ADULTS

Affix Label Here

NOTICE—All information which would permit identification of the individual will be eliminated after data processing has been completed. Only aggregate data will be published.

Dear Colleague:

We have been awarded a contract from the United States Office of Education to assess the needs that deaf adults have for continuing education.

The purposes of this study are (1) to assess the needs that deaf persons have for education after secondary school, (2) to explore ways of meeting these needs, and (3) to develop a set of recommendations which will assist the Federal Government in planning future support for continuing education of deaf adults.

The National Association of the Deaf has indicated that you are a leader of deaf people in your state. As a leader you have many valuable insights into the needs of your constituents which will greatly enhance this study.

Of course, no information will be released that will identify any individual respondent; i.e., all information released will be on an aggregate basis. Further you will note that you are requested to give your name on the questionnaire. This is for the sole purpose of providing information for follow-up letters to those that are late in responding. Once you have responded, your name will be destroyed and there will be absolutely no way to associate any of your responses with your name.

Please complete the enclosed questionnaire and return it in the postage-paid, pre-addressed envelope as soon as possible.

We greatly appreciate your cooperation.

Sincerely,

Jerome D. Schein

DEAFNESS RESEARCH & TRAINING CENTER

Jerome D. Schein, Ph.D.
Director
Deafness Research & Training Center
New York University

Name: _____

Address: _____
Street and Number | City | State | Zip Code

1a. Do you now hold or have you held within the past three years, any office or position with a club or organization of the deaf?

☐ Yes ☐ No (Skip to Ques. 2)

1b. If "Yes," what office do you now hold or have you held?

_____

2. How would you rate the following educational needs of deaf adults in your state? (Circle one number for each need)

Educational Needs	No Priority	A Little Priority	Moderate Priority	Substantial Priority	Very Great Priority
Reading improvement	1	2	3	4	5
Writing improvement	1	2	3	4	5
Speech improvement	1	2	3	4	5
Math improvement	1	2	3	4	5
Preparation for a high school diploma	1	2	3	4	5
College degree program	1	2	3	4	5
Preparation to learn a trade	1	2	3	4	5
Leisure time activities	1	2	3	4	5
Improving family relations	1	2	3	4	5
Improving home making skills	1	2	3	4	5
Bible and Religious subjects	1	2	3	4	5
Foreign languages	1	2	3	4	5
Health education	1	2	3	4	5
Public affairs (politics, economics, etc.)	1	2	3	4	5

Other (specify) _____

3a. Are any educational resources to meet the needs listed in question 2 now available for deaf adults in your state?

☐ Yes (Skip to Ques. 4a) ☐ No

3b. If "No," are there any programs being planned to provide such educational programs for deaf adults?

☐ Yes ☐ No (Skip to Ques. 4a)

3c. If "Yes," when is the program scheduled to begin?

_____ _____
Month Year

4a. How many counties are there in your state? _____
Number of Counties

4b. Of these, how many counties have one or more of the following educational programs for deaf adults?

Basic Literacy Skills – High School Equivalency – Vocational Training – Career and Professionally Related – Leisure Time (Crafts and Recreation) – Home and Family Life – Human Relations – Public Affairs – Liberal Arts

_____
Number of Counties

5a. Please estimate the number of classes there are in your state exclusively for deaf adults and the number of regular classes in which deaf adults are enrolled.

Number of Classes Exclusively for Deaf Adults	Number of Regular Classes in Which Deaf Adults Are Enrolled

5b. Do you prefer classes exclusively for deaf adults or regular classes with interpreters and notetakers?

- ☐ Classes exclusively for deaf adults
- ☐ Regular classes with interpreters and notetakers
- ☐ Both (please explain)_____

6a. Which of the following organizations or groups sponsor continuing education programs for deaf adults in your community? (Check all that apply)

- ☐ Public schools
- ☐ High schools
- ☐ Colleges
- ☐ Cooperative extension service
- ☐ Government manpower training program
- ☐ Private trade and business schools
- ☐ Churches
- ☐ Clubs for the deaf
- ☐ Library
- ☐ YM/YWCA and community centers
- ☐ TV stations
- ☐ Other (specify)_____
- ☐ None

6b. Are any of the groups in question 6a, who do not presently have a program for deaf adults, planning to establish a program?

☐ Yes ☐ No (Skip to Ques. 7)

6c. If "Yes," which groups?_____

7. Which, if any, of the following barriers to continuing education for deaf adults do you consider to be serious problems in your state?

- ☐ Lack of funding
- ☐ Lack of teachers who are experienced in teaching deaf adults
- ☐ Lack of interpreters
- ☐ Inadequate communication skills
- ☐ Poor academic background of deaf adults
- ☐ Lack of interest by deaf adults
- ☐ Lack of suitable materials
- ☐ Lack of educational needs of deaf adults
- ☐ Lack of awareness by deaf adults of existing educational opportunities
- ☐ Other (please specify)_____

8. Of the above, which do you consider to be the major barriers in providing continuing education programs to deaf adults in your state?

_____

_____

_____

9a. Have you had any previous experience with continuing education programs for deaf adults?

☐ Yes ☐ No (Skip to Ques. 10a)

9b. If "Yes," in what capacity?

☐ Taken a course
☐ Taught a course
☐ Established a program
☐ Administered a program
☐ Other (please specify) _____

_____

10a. Have you ever taken a course or been involved in continuing education programs by television?

☐ Yes ☐ No (Skip to Ques. 11a)

10b. If "Yes," what course? _____

10c. How would you rate your experience with that course?

☐ Excellent ☐ Good ☐ Fair ☐ Not very good ☐ Poor

10d. What are the reasons you evaluated the course that way?

_____

_____

_____

11a. Have you ever taken or been involved in instruction by film?

☐ Yes ☐ No

11b. If "Yes," what course? _____

11c. How would you rate your experience with that course?

☐ Excellent ☐ Good ☐ Fair ☐ Not very good ☐ Poor

11d. What are the reasons you evaluated the course that way?

_____

_____

_____

CEDA-3

Questionnaire Sent to State Directors of Adult Education

SURVEY OF CONTINUING EDUCATION FOR DEAF ADULTS

Affix Label Here

NOTICE—All information which would permit identification of the individual will be eliminated after data processing has been completed. Only aggregate data will be published.

Dear Colleague:

We have been awarded a contract from the United States Office of Education to assess the needs that deaf adults have for continuing education.

The purposes of this study are (1) to assess the needs that deaf persons have for education after secondary school, (2) to explore ways of meeting these needs, and (3) to develop a set of recommendations which will assist the Federal Government in planning future support for continuing education of deaf adults.

For purposes of this survey, a deaf person is defined as one who cannot hear and understand speech; hence, special provisions must be made to accommodate such people in most classrooms.

As director of adult education programs you are in a position to provide valuable information about continuing education programs for deaf adults in your state. All information given will be held in confidence, and only aggregate data will be published. Please complete the enclosed questionnaire and return it at your earliest convenience.

We greatly appreciate your cooperation.

Sincerely,

Jerome D. Schein

DEAFNESS RESEARCH & TRAINING CENTER

Jerome D. Schein, Ph.D.
Director
Deafness Research & Training Center
New York University

1a. Does your state now make special provisions to meet the continuing education needs of deaf adults?

☐ Yes (Skip to Ques. 2) ☐ No

1b. If "No," is there a plan to provide continuing education to deaf adults?

☐ Yes ☐ No (Skip to Ques. 8)

1c. If "Yes," when is the program scheduled to begin?

Month Year

2. What special provisions are made? (Check all that apply)

☐ Provide direct educational services to deaf adults.
☐ Provide specially trained interpreters, teachers and counselors of deaf adults.
☐ Fund and supervise public school and college programs for continuing education of deaf adults.
☐ Fund special projects for deaf adults.
☐ Provide consultation and technical assistance to schools and organizations providing continuing education to deaf adults.
☐ Prepare special materials for use with deaf students.
☐ Other (please specify)

Please complete the following table by providing your best estimate of the number of classes and the number of deaf students enrolled in each by sponsoring agency. (If breakdowns by sponsoring agency are not possible, enter your estimates under "Unspecified"). If unable to make an estimate for any one of the data cells, write in NA (Not Able).

Sponsoring Agency	Classes Exclusively for Deaf Adults		Regular Classes in Which Deaf Adults Are Enrolled	
	Number of Classes	Number of Deaf Students	Number of Classes	Number of Deaf Students
Special schools for the deaf				
Public schools				
Colleges and Universities Credit (degree) classes				
Non-credit classes				
Proprietary and trade schools				
Voluntary and Community Organizations (libraries, unions, museums, YWCA and YMCA, churches, etc.)				
Cooperative Extension Service				
Unspecified				

4. Please estimate the number of deaf adults enrolled in the following different kinds of programs, by sponsoring institutions: (If you cannot provide information by sponsoring institution, insert the information in column headed "Unspecified"). If unable to make an estimate for any one of the data cells, write in "NA" (Not Able).

Educational Programs*	Special Sch. for the Deaf	Public Sch.	Col. and Univ.	Prep. ... Sch.	Vol. Assoc.	Coop. Extn. Serv.	Unspecified
Basic literacy skills							
High School equivalency							
Vocational (trade skills)							
Career and Professionally Related							
Leisure time (crafts and recreation)							
Home and family life							
Public affairs							
Human Relations							
Liberal arts							

Other (please specify)

*For definitions of services see last page of questionnaire.

5a. How many counties (cities and towns in the New England States) are there in your state? _____
Number of Counties

5b. Of these, how many have one or more of the educational programs (listed in Ques. 4) for deaf adults regardless of funding source? _____
Number Having Programs for Deaf Adults

6a. Do you have any special requirements for a teacher of deaf adults?

☐ Yes ☐ No (Skip to Ques. 6b)

If "Yes," What? _____

6b. Are counselors of deaf adults required to have courses on deafness or manual communication skills?

☐ Yes, courses on deafness
☐ Yes, manual communication skills
☐ Yes, both
☐ No
☐ Does not apply. We do not have any counselors who work primarily with deaf adults.

6c. Are interpreters required to have certifications by the Registry of Interpreters for the Deaf?

☐ Yes ☐ No

7. To the best of your knowledge, when was the first class for deaf adults established in your state?

☐ None established
☐ This year will be the first
_____ Years ago

8. Please rate the following educational needs of deaf adults in your state. (Circle one number for each need.)

Educational Service*	No Priority	A Little Priority	Moderate Priority	Substantial Priority	Very Great Priority
Basic literacy skills	1	2	3	4	5
High school equivalency	1	2	3	4	5
Vocational (trade skills)	1	2	3	4	5
Professionally related	1	2	3	4	5
Leisure time (crafts and recreation)	1	2	3	4	5
Home and family life	1	2	3	4	5
Public affairs	1	2	3	4	5
Human relations	1	2	3	4	5
Liberal arts	1	2	3	4	5

Other (please specify) _____

*For definitions of services see last page of questionnaire.

9a. In the past 12 months have you received any requests for classes or programs for deaf adults?

☐ Yes ☐ No (Skip to Ques. 10a)

9b. If "Yes," was the request from a group, individual or both?

☐ Group ☐ Individual ☐ Both

10a. Check any of the following barriers which you consider to be a serious problem to continuing education of deaf adults?

- ☐ Academic
- ☐ Lack of funding
- ☐ Lack of teachers who are experienced in teaching deaf adults
- ☐ Inadequate communication skills
- ☐ Poor academic background of deaf adults
- ☐ Lack of interest by deaf adults
- ☐ Lack of interpreters
- ☐ Lack of suitable materials
- ☐ Lack of educational needs of deaf adults
- ☐ Lack of awareness by deaf adults of existing educational opportunities
- ☐ Other (specify)_____

10b. Of the above, which do you consider to be the major barriers in providing continuing education programs to deaf adults?

11a. Does your state use regular TV or CATV programs in continuing education?

☐ Yes ☐ No (Skip to Ques. 12a)

11b. If "Yes," which of the following?

☐ PBS ☐ ITV ☐ ETV ☐ Commercial ☐ ITFS

☐ Other (specify)_____

11c. Are they modified for deaf viewers?

☐ Yes ☐ No (Skip to Ques. 11e)

11d. If "Yes," how?_____

11e. Are there future plans for modifying these or other programs for deaf students?

☐ Yes ☐ No (Skip to Ques. 12a)

11f. If "Yes," how will they be modified?_____

12a. Does your state use film programs in continuing education?

☐ Yes ☐ No (Skip to Ques. 13)

12b. If "Yes," are they modified for deaf students?

☐ Yes ☐ No (Skip to Ques. 12d)

12c. If "Yes," how?_____

12d. Are there future plans to modify these or other film programs for deaf students?

☐ Yes ☐ No (Skip to Ques. 13)

12e. If "Yes," how?_____

13. How are TV and film programs circulated?

- ☐ Does not apply, do not use TV or film programs
- ☐ State Universities
- ☐ Federal Agencies (MSCF)
- ☐ Library Facilities
- ☐ Other (specify) _____

14. Does your state use extension courses, cassette video tapes, correspondence courses, University without Walls in continuing education for deaf adults?

Extension courses.....	☐ Yes	☐ No
Cassette video tapes.....	☐ Yes	☐ No
Correspondence courses.....	☐ Yes	☐ No
University without Walls.....	☐ Yes	☐ No

15a. Does your state budget make any financial provisions for accommodating adult deaf persons in continuing education?

☐ Yes ☐ No (Skip to Ques. 16a)

15b. If "Yes," how much? $_____
Amount

16a. Is there an office in your state which has the responsibility for continuing education of deaf adults?

☐ Yes ☐ No (Skip to Ques. 17)

16b. If "Yes," what is the name of the director of that office and his address?

Name of Director _____

Address _____

17. Will you please send us any printed materials you have related to your state program of continuing education of deaf adults?

Name of person completing questionnaire _____

Title _____

Address _____

Phone Number _____

DEFINITIONS OF SERVICES

Basic Literacy Skills – The ability to read, write and compute.

High School Equivalency – Special programs designed to enable a person to obtain a high school diploma.

Vocational Training – Courses and programs designed to prepare adults for semiskilled and skilled trade, office and craft occupations; courses and programs designed to qualify persons for licensure and certification needed to practice their vocation; and courses and programs which will enable adults to increase present vocational skills.

Career and Professionally Related – Courses and programs normally offered at a college or university leading toward an undergraduate, graduate, or professional degree, which will prepare persons to enter one of the professions; courses and programs which will enable persons to qualify for licensure and certification to practice the profession; and courses and programs which will maintain and advance insights and skills utilized by those currently engaged in the professions.

Leisure Time (Crafts and Recreation) – The more effective use of leisure time, including the development of hobby and craft skills, greater appreciation of or participation in the arts, a deeper sense of spiritual and aesthetic values, recreational pursuits.

Home and Family Life – This area would include home budgeting, marketing, consumerism generally, nutrition and health.

Human Relations – The improvement of interpersonal relationships. This includes the whole gamut of human relationships – individual, family, group.

Public Affairs – The increasing effectiveness of citizenship and community participation, including leadership development.

Liberal Arts – Courses designed specifically for persons who wish to learn more about themselves, about the arts and humanities, and about their society and their world.

CEDA-4

Questionnaire Sent to State Directors of Rehabilitation

SURVEY OF CONTINUING EDUCATION FOR DEAF ADULTS

Affix Label Here

NOTICE—All information which would permit identification of the individual will be eliminated after data processing has been completed. Only aggregate data will be published.

Dear State Administrator:

We are conducting a survey of continuing education for deaf adults on behalf of the United States Office of Education.

The purposes of this study are (1) to assess the needs that deaf persons have for education after secondary school, (2) to explore ways of meeting these needs, and (3) to develop a set of recommendations which will assist the Federal Government in planning future support for continuing education of deaf adults.

The enclosed questionnaire inquires about your agency's policies regarding purchase of continuing education for deaf clients. For purposes of this survey deaf clients are defined in the same way as you define them in reporting to the Rehabilitation Services Administration.

This questionnaire has been reviewed by Mr. O. E. Reece, Chairman, Committee on Deafness, CSAVR. He has approved its circulation.

All information given will be held in confidence, and only aggregate data will be published. Please complete the enclosed questionnaire and return it at your earliest convenience.

We greatly appreciate your cooperation.

Sincerely,

Jerome D. Schein

Jerome D. Schein, Ph.D.
Director
Deafness Research & Training Center
New York University

DEAFNESS RESEARCH & TRAINING CENTER

Please Note: The definition of deafness you use in responding to the following questions should be the same as the one you use in completing reports to the Rehabilitation Services Administration.

1. Please indicate which of the following categories of educational services can or cannot be authorized and the number of deaf clients who were provided the following educational services funded by your agency.

Educational Service*	Can be Authorized	Cannot be Authorized	Number of Deaf Clients
Basic Literacy Skills			
High School Equivalency			
Vocational (Trade Skills)			
Career and Professionally Related			
Leisure Time (Crafts and Recreation)			
Home and Family Life			
Public Affairs			
Human Relations			
Liberal Arts			

*For definitions of services see last page of questionnaire.

2. In authorizing payment for educational services, which of the following categories are permissible?

	Payments		
Service Categories	Not Allowed	Provisionally Allowed	Allowed
Tuition			
Interpreting			
Tutoring			
Notetaking			

3a. Do you provide your counselors with a list of facilities authorized to provide educational services for deaf clients?

☐ No (Skip to Ques. 5) ☐ Yes

3b. Can you provide us with a copy of this list?

☐ No ☐ Yes

4. Do you presently maintain a list of qualified interpreters?

☐ No ☐ Yes

---

5. In authorizing the purchase of interpreting services, which of the following apply?

☐ Interpreters must be members of Registry of Interpreters for the Deaf

☐ Interpreters must be certified by Registry of Interpreters for the Deaf

☐ Interpreters must be approved by one or more counselors on our staff who is capable of assessing interpreting skills

☐ Our agency has developed its own list of qualified interpreters based on information from various sources

☐ We have no policy regarding interpreter qualifications

☐ We do not reimburse interpreting expenses

☐ Other (please specify) _____

DEFINITIONS OF SERVICES

Basic Literacy Skills – The ability to read, write and compute.

High School Equivalency – Special programs designed to enable a person to obtain a high school diploma.

Vocational Training – Courses and programs designed to prepare adults for semiskilled and skilled trade, office and craft occupations; courses and programs designed to qualify persons for licensure and certification needed to practice their vocation; and courses and programs which will enable adults to increase present vocational skills.

Career and Professionally Related – Courses and programs normally offered at a college or university leading toward an undergraduate, graduate, or professional degree, which will prepare persons to enter one of the professions; courses and programs which will enable persons to qualify for licensure and certification to practice the profession; and courses and programs which will maintain and advance insights and skills utilized by those currently engaged in the professions.

Leisure Time (Crafts and Recreation) – The more effective use of leisure time, including the development of hobby and craft skills, greater appreciation of or participation in the arts, a deeper sense of spiritual and aesthetic values, recreational pursuits.

Home and Family Life – This area would include home budgeting, marketing, consumerism generally, nutrition and health.

Human Relations – The improvement of interpersonal relationships. This includes the whole gamut of human relationships–individual, family, group.

Public Affairs – The increasing effectiveness of citizenship and community participation, including leadership development.

Liberal Arts – Courses designed specifically for persons who wish to learn more about themselves, about the arts and humanities, and about their society and their world.

Mailgram Sent as Third Follow-up to Deaf Leaders

MGMNY1T MSB
2-083171U073016 03/14/79
ICS MGMNCSA CHNY
00016 MLTN VA
ZIP

western union Mailgram

UNITED STATES POSTAL SERVICE

WE NEED YOUR HELP TODAY.

RECENTLY WE SENT YOU A QUESTIONNAIRE ASKING YOUR OPINIONS ABOUT CONTINUING EDUCATION FOR DEAF ADULTS. YOUR OPINIONS ARE IMPORTANT, SO WE WANT TO HEAR FROM YOU, EVEN IF YOU CANNOT ANSWER ALL QUESTIONS.

IF YOU HAVE SENT YOUR QUESTIONNAIRE TO US ALREADY, THANK YOU. IF YOU NEED A NEW ONE, PLEASE WRITE TO US AND WE WILL SEND YOU ANOTHER QUESTIONNAIRE.

PLEASE FILL OUT AND RETURN YOUR QUESTIONNAIRE TODAY.

THANK YOU FOR YOUR COOPERATION.

SINCERELY,

JEROME D. SCHEIN, PH.D.
DIRECTOR
DEAFNESS RESEARCH & TRAINING CENTER
80 WASHINGTON SQUARE EAST
NEW YORK, NEW YORK 10003

22:56 EST

MGMNY1T MSB

Cover Letter and Questionnaire Sent to Deans and Directors

of University Extension Programs

New York University

School of Continuing Education and Extension Services

126B Shimkin Hall
Washington Square
New York, N.Y. 10003
Telephone: (212) 598-2134

March 14, 1975

SURVEY OF CONTINUING EDUCATION FOR DEAF ADULTS

Enrolment of Deaf Adults in
University Extension Programs

To: Dean, School of Continuing Education

I am assisting the Deafness Research and Training Center (DRTC) of New York University in a national study assessing the continuing education needs of deaf adults and the educational resources available to them. From the study, we hope to develop a set of recommendations which will assist the Federal Government in planning future support for continuing education of deaf adults.

Of particular interest is the extent to which the Continuing Education or Extension Divisions of colleges and universities are now providing deaf adults with continuing education opportunities; and if they are not, what they consider to be barriers for increased educational programs for the deaf. Accordingly, I would be most grateful to you if you or a member of your staff would complete and return to me the enclosed questionnaire, whether or not your School now offers programs for deaf adults.

For purposes of this survey, deaf persons are defined as those who cannot hear and understand speech; hence, special provisions must be made to accomodate them in most classrooms.

Thank you for your cooperation and help. I shall be happy to send you the report of our findings.

Sincerely yours,

Henry T. Lipman

Henry T. Lipman
Professor of Adult Education

HTL/blk

NEW YORK UNIVERSITY
School of Continuing Education

SURVEY OF CONTINUING EDUCATION FOR DEAF ADULTS
Enrollment of Deaf Adults in
University Extension Programs

Name of Institution _____

Address _____

1. Are there any deaf adults currently enrolled in any of your continuing education programs?

☐ Yes ☐ No ☐ Don't know

a) If "Yes", about how many deaf adults are enrolled in credit and in non-credit courses?

☐ Credit

☐ Non-credit

b) About how many deaf adults are enrolled in the following kinds of programs?

	Credit	Non-Credit
Career and Work Related	____	_____
Leisure time (crafts and recreation)	____	_____
Home and family life	____	_____
Public affairs	____	_____
Human Relations	____	_____
Humanities and arts	____	_____
Other (please specify) _____	____	_____

c) Are the deaf students in classes:

☐ Exclusively for deaf

☐ With hearing students

☐ Both for deaf only and with hearing students

d) In classes for both deaf and hearing students, how is the problem of "translation" handled?

☐ No special provision

☐ Sign language interpreter

☐ Other (specify)_____

2. Do you have any special promotional effort to recruit deaf students?

☐ Yes ☐ No

If "Yes", how is promotion conducted?

☐ Newspaper ads

☐ Special mailings

☐ Contact with organizations of deaf

☐ Reduced or free tuition

☐ Other (specify) _____

3. Are you now planning any changes in your present program which would:
   a) Offer more or fewer programs for the deaf?

☐ Yes ☐ No

If "Yes", what changes do you contemplate? _____

_____

_____

   b) Increase recruitment of deaf students?

☐ Yes ☐ No

If "Yes", what changes do you contemplate? _____

_____

4. Within the past three years, has your school been asked by an outside group to schedule programs for deaf adults?

☐ Yes ☐ No

If "Yes", by what group(s)?

☐ Organizations of the deaf

☐ Social agencies

☐ State Vocational Rehabilitation Service

☐ Other (specify) _____

What programs have been recommended? _____

_____

5. What do you consider to be major barriers in providing continuing educational opportunities for the deaf?

☐ Inability of deaf persons to pay tuition

☐ Lack of government funding for special programs

☐ Lack of qualified faculty for teaching deaf students

☐ Inability to provide adequate counselling and guidance

☐ Unawareness of educational needs of deaf students

☐ Difficulty in recruiting deaf students

☐ "Disruptiveness" of interpreters in regular classes

☐ Inability of deaf people to participate in class discussions

☐ Unawareness of the deaf to your program

☐ Psychological/emotional problems of the deaf

☐ Other (specify) _____

_____

Name of person completing questionnaire:

_____

Title: _____ Telephone: _____